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ABSTRACT

This two-volume collection of studies attempts to measure and describe the sociolinguistic norms of a Puerto Rican bilingual community. The target population of 431 individuals in a single neighborhood in Jersey City identify with the large Puerto Rican community of the greater New York area. The individual studies, all written to be understood independently, are grouped into background studies and sociologically, psychologically, and linguistically oriented sections. Some interviews and census studies are included. Alternative measures of bilingualism are discussed in a concluding section, and additional papers, instruments, and code sheets are contained in theoretical addenda and appendixes. (AF)

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FINAL REPORT

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BILINGUALISM IN THE BARRIO

August 1968

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BILINGUALISM IN THE BARRIO

(The Measurement and Description of Language Dominance in Bilinguals)

Joshua A. Fishman,

Robert L. Cooper, Roxana Ma,

et al.

Yeshiva University

New York, New York

August 1968

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U.S. DEPARTMENT OF

HEALTH, EDUCATION AND WELFARE

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A two year study involving hundreds of subjects, several disciplines and an extremely complicated cluster of problems cannot be completed at all, much less completed as successfully as has been the Project to which this report pertains, without the active assistance of many individuals. It is a pleasure indeed to mention the names of those without whose help and understanding neither the Project nor this report would have been possible.

My two research associates, Robert L. Cooper and Roxana Ma, planned, supervised and interpreted most of the psychologically and linguistically oriented components of this Project. They discharged their responsibilities with such intelligence, good cheer, limitless energy and devotion that they did much more than honorably carry through the tasks that were initially allocated to them. They improved these tasks and, in the process of doing so, enriched the Project as well as their colleagues and associates. It was a rare delight and a bit of still rarer good fortune to have such able researchers associated with me and I hereby acknowledge my very considerable indebtedness to them.

During the initial year of this Project we had the opportunity of benefiting from John Gumperz's advice, criticism and experience. Although we could not and would not entirely restructure this Project along the lines of his ethno-methodological convictions, we all benefited from his critical examination of our methods and our concepts.

The major research assistants associated with the Project throughout all or most of its history were Lawrence Greenfield, Eleanor Herasimchuk and Gerard Hoffman. Their good work is recorded

in many sections of this report. It is clear that each of them has ahead of him or her a productive career in the study of language and social behavior and that all three will continue to make their marks in the literature of sociolinguistics.

To Heriberto Casiano go my heartfelt thanks for smoothing our introduction to the Puerto Rican community in New York and for guiding our contacts with the members of the target-study community in Jersey City. His many friends and acquaintances, his personal warmth, his intelligent grasp of what we were after and what we lacked, his insight into the behaviors of his fellow Puerto Ricans in the Greater New York City Area and on the Island, all of these characteristics made him an invaluable member of our team.

I am also greatly indebted to the officers of Aspira for permitting us to observe the meetings of Aspira clubs in various public and private high schools in the Metropolitan Area and for encouraging local clubs to cooperate with our requests for interviews, testing sessions, experimental sessions, etc. It is my hope that Aspira as an organization and Aspira members as individuals will find many things in this report that will be of interest and of importance in fostering greater and more creative Puerto Rican self-understanding in the New York Area and in the continental United States as a whole.

Other significant contacts with the Puerto Rican community were made possible as a result of the kindness of Mr. Peter Block (then chairman of the Puerto Rican Committee of Caravan House), Father Joseph P. Fitzpatrick (Fordham University), Dean Joseph Scott (Jersey City State College), Father Robert S. Call (St. Michael's R.C. Church, Jersey City), Father Joseph Plunkett (St. Boniface's R.C. Church, Jersey City). Much of our understanding of Puerto Rican behavior is

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Although this Project was conceived during a period when the Vietnam war had not yet drawn off the Federal funds originally available for research, it was approved and budgeted when sufficient funds were no longer available. As a result, the Federal funds we received were sufficient for data collection purposes but not for data analysis. Without the help of the College Entrance Examination Board and its research officers Warren Willingham and S. A. Kendrick the data we had accumulated could never have been analyzed and this report could never have been written. The CEEB's support is a wonderful example of faith in the eventual "pay-off" of theoretically guided research. In acknowledging my deep gratitude to the Board, I can only hope that its faith will be rewarded and that some of the instruments and methods developed by this Project for the measurement and description of widespread and relatively stable bilingualism will also prove to be of value in the planning of testing instruments or guidance

services for the bilingual student and applicant populations of which the Board has become increasingly cognizant.

A faithful group of assistants, translators, transcribers, recorders and coders helped us obtain our data and then convert it into analytically manageable shape. Without the bilingual skills of Francine Stieglitz, Trinidad González, Eva Rivera, Milta Rivera, Carmen Montalvo, Norma Rodríguez, Cecilia Rosenblum, Diane Sperber, Lope Pérez, Angel Corujo, Manuel Fishman and Louis Vázquez it would have been impossible to collect, process and analyze the huge amount of bilingual data that this Project ultimately utilized. An additional group of eager and inventive students (enrolled in the Language and Behavior Ph.D. program at Yeshiva University) contributed a number of term papers and analyses to the Project which vastly increased its scope and its depth. Tomi Berney, Sheldon Fertig, Joav Findling, Barbara Fowles, Abraham Givner, Jim Kimple, Charles Terry, Judah Ronch, Stuart Silverman, Beverly Vardi and Martin Edelman all deserve to be mentioned for their noble efforts at learning and at contributing to learning in the area of societal bilingualism. Some of their papers have been included as separate chapters of this report. Others are merely mentioned or summarized in chapters written by myself and by the senior research associates. In both cases the students deserve thanks and praise for their fine work.

My final thanks are to a trio of friends on whom I relied greatly for advice and assistance. Mr. Mendl Hoffman not only processed our data with great efficiency and accuracy but offered invaluable advice in selecting analytic approaches for data that was frequently beset by problems and blessed by opportunities hitherto unrecorded in sociolinguistic research. Mrs. Marice Harris, office manager for the Project, enabled me to attend to my work, and to find the full measure of pleasure in so doing, by her limitless ability to handle all administrative problems deriving from and impinging upon the Project. The fact that the Project office work was done with dispatch, with tact and with infinite patience and good humor immeasurably increased our enjoyment and our accomplishment. Mrs. Ruth Salinger joined the staff in the Project's final quarter in order to turn our scrawled manuscripts into beautifully typed copy. All readers of this report will be as indebted to her as I am for every attractive and error-free page.

Joshua A. Fishman
Project Director

Part I

INTRODUCTION

Chapter
I

I. INTRODUCTION: THE MEASUREMENT AND DESCRIPTION OF WIDESPREAD AND RELATIVELY STABLE BILINGUALISM

Joshua A. Fishman

A rather small number of definite and interrelated purposes prompted our study of Bilingualism in the Barrio and served as guideposts to us during the two years of our collective labors on this project. The enumeration and discussion of these purposes or goals at the very outset should assist the reader in understanding this report and in evaluating the distance that we may have come toward answering the questions that initially stood before us.

1. Intra-group Bilingualism: Micro-processes and Macro-structures.

The measurement and description of bilingual populations is everywhere undergoing an exciting rebirth or revitalization. The young discipline of sociolinguistics is largely responsible for this excitement since it has emphasized a number of stimulating propositions and concepts (doing so largely on the basis of theoretical considerations as well as on the basis of qualitative studies of small groups) that require substantiation and refinement in connection with the study of such larger societal contexts as neighborhoods, towns, cities, regions or even countries.

Among the major messages of sociolinguistics is that which states that the individual should be viewed as a member of a speech community. A speech community is characterized by definite norms of language and behavior. These norms not only encompass the varieties or languages that exist within the speech community for its own internal communicative needs but also relate them to the types of other-than-speech behaviors (the interactions, the mutual rights and obligations, the roles and statuses, the purposes and identifications) in which various networks within the community are engaged. Thus, the description and measurement of an individual's bilingualism (as of an individual's repertoire range with respect to the language varieties that exist even within monolingual communities of any complexity) should reflect and disclose the sociolinguistic norms of the speech networks and the speech community of which he is a part precisely because the latter (the sociolinguistic norms) underlie the former (the individual's bilingualism).

The sociolinguistic study of bilingualism focuses not on language acquisition (since bilingualism is presumably acquired much as all other socially normed behavior is acquired: by exposure to and interaction with a community that lives in accord with the norms of usage and that is involved in the normal process of change to which most communities and most norms are exposed) but on communicative appropriateness. The sociolinguist investigating a bilingual speech community must ask not "how well do they speak X and Y?", but, primarily, "what are the different varieties of X and Y, who uses them and when?". Thus, the sociolinguist assumes that each "language" utilized in a bilingual speech community is itself merely an abstraction from several varying lexical, grammatical and phonological realizations. However, these variations are far from random or idiosyncratic. Indeed, they are governed by norms which are implicitly understood by native members of the communities in question and which the investigator must elicit or discover. These norms imbed the variation in language usage within variation in other concomitant social behavior. A valid sociolinguistic description of a bilingual speech community is one which faithfully reflects the norms of bilingual usage that exist with that community as a whole. Individuals or small networks may then be described in terms of similarity or dissimilarity of their usage profile to the profile that obtains for the speech community or larger networks more generally.

The foregoing goal (to describe the bilingualism of a speech community in terms of the sociolinguistic norms that exist within it) is complicated enough even when we deal only with small networks of individuals. Even then (i.e., even when the actual speech and behavior can be meticulously recorded and exhaustively examined) the processes of human interaction and variety switching are so subtle and complex that the investigator's task is a formidable and, as yet, an unmastered one. However, our task, in the presently reported study, was an even more complicated one, namely, to describe sociolinguistic norms on the basis of data representative of larger societal contexts.

In going from the small group to the larger societal context we inevitably go from the immediate context of speech, and from the immediate corpus of speech, to the larger contexts of behavior that surround both speech contexts and speech samples. However, just as the individual's bilingualism is structured in accord with his network's and his community's norms, so is the process and the corpus of speech structured in accord with higher level regularities. In both cases we must utilize the performance of individuals to recognize the norms that obtain. However, when we generalize from individuals to small network we can preserve the direct and exhaustive analysis of the language and behavior that are of concern to us. When we need to generalize from individuals to entire neighborhoods or countries we must frequently find larger contexts than the immediate context of individual speech and more suggestive or parsimonious data than the individual's corpus of speech. However, if the guidance provided by sociolinguistic theory is not to be lost the large scale studies that we have in mind must continue to seek counterparts, at their own level, to the small group notions that have thus far been proposed.

One goal of this project was to maintain as close a link to small group sociolinguistics as possible while developing data gathering and data analyzing techniques that might be of value in the study of widespread and relatively stable bilingualism in large and complex social environments. Population and behavioral sampling methods, quantitative analyses of mass data, multiple and interrelated measurements--all of these concerns and pursuits that are common to social science inquiry on large populations were to be part and parcel of our work; at the same time we were to struggle to maintain contact with such micro-sociolinguistic notions as repertoire range in language and behavior, compartmentalization of language and behavior, situational and metaphorical variation, etc. Our purpose, then, was to conduct a large scale study, but yet an intensive study; to go beyond the limitations of small group sociolinguistics but yet not to break with the theoretical stimulation that it has provided.

2. The Contextualization of Bilingualism.

If our first charge derived from challenges within the field of sociolinguistics, our second charge derived from challanges in a number of neighboring fields that have long been interested in bilingualism. Our second goal was to involve various disciplines in the study of widespread and relatively stable bilingualism and, in the process of bringing to bear on this matter disciplines that had traditionally gone their separate ways, to subject each of them to sociolinguistic criticism and revision.

Psychological study of bilingualism has, in recent years, produced a number of interesting findings, methods and theories. All of these might be considerably enriched if the sociolinguistic notion of contextualization of verbal interaction were taken into account. Thus, while the psychologist interested in bilingualism is likely to ask "which language is stronger (or weaker) in this individual (or population)?" or "which is used more fluently?", the sociolinguist is likely to restate this question in contextual terms and to ask "when and by whom is one language used primarily and when the other?". Does this sociolinguistic restatement of the problem represent an improvement? It does, if it can be shown, e.g., that individuals or communities can appear to be bilingually balanced (i.e., using each language equally fluently) when viewed from the psychologist's overall perspective and yet reveal marked and reliable imbalances when viewed in different sociolinguistic contexts. Can traditional psychological measures of bilingualism be contextualized so as to reveal differences in degree of proficiency when these exist between one societal context and the next? If so, what relationship will exist between such measures and others that are more naturalistically sociolinguistic to begin with in that their concern is with usage rather than with proficiency (fluency, output, correctness)?

Sociology's interest in bilingualism has traditionally been limited to self-report measures (such as the questions utilized in language censuses). The longstanding difficulty with such measures has been that they have not been validated with respect to either proficiency or usage and that they too have not been sufficiently contextualized to either recognize or yield societal patterns with respect to the functional allocation of codes in bilingual speech communities. Our goal, therefore, was to plan a number of new and revised self-report measures, drawing explicitly upon sociolinguistic theory in the process of instrument design, and, then, to compare the data obtained via such instruments with direct and indirect measures of bilingual proficiency and bilingual usage.

Obviously, it is easier to ask a person about his language behavior than to gather sufficient data in order to extract the regularities in such behavior from the data alone. The easier route is exactly the one that sociology has traditionally followed in studying societal bilingualism. However, now that sociolinguistics has sharpened sociological sensitivities for nuances in language usage we are doubly beholden to face the questions of reliability and validity with respect to self-report data. What kinds of questions concerning their own language behavior can individuals drawn from different kinds of speech networks answer, and what is the reliability and the validity of the answers they give? Only by answering such basic questions can we know where and when it is most crucial to replace self-report methods with more difficult measures of usage and proficiency in future studies of large populations that are not amenable to exhaustive small group research.

Linguistics too has traditionally treated bilingualism in a parochial fashion. It has primarily asked how two proportedly pure and independent codes have interfered with or influenced each other. It has usually not asked when these "pure" varieties are used (or by whom) nor when the "interfered" varieties are employed. Indeed, in quite recent days, "immaculate linguistics" has retreated even further from usage or performance and, in so doing, has adopted the pretense that neither usage nor performance are of real interest, but, rather, that the linguistic capacity of the human species and the ideal structure of the pure code that underlies speech usage and speech corpuses are the only matters that deserve attention. Sociolinguistics, on the other hand, stresses the reality of performance and the equal reality of the norms (linguistic and behavioral) that apply to performance. Thus, sociolinguistics asks the linguist to go beyond his usual interest in the standard speech variety and his usual satisfaction with a single informant, to concern with non-standard varieties, with the representativeness of informants and with differential performance within as well as between informants. Sociolinguistics also impels the linguistic analysis of bilingual corpuses toward greater quantification, toward a more frequent concern for the reliability of transcription, and toward more frequent curiosity as to the agreement between linguistic and other disciplinary analyses.

All in all, then, the second major purpose of this study was to devise new and better means of measuring and describing widespread and relatively stable bilingualism and of doing so in as contextualized and as interdisciplinary a fashion as possible.

3. Utility Considerations.

If we believe that "nothing is as practical as a good theory" (Kurt Lewin) then we should admit that the test of good theory is that it is adequate to the demands of application. While our studies were not addressed to immediate applied concerns several such concerns were sufficiently close to consciousness to interact with our theoretical and methodological involvements.

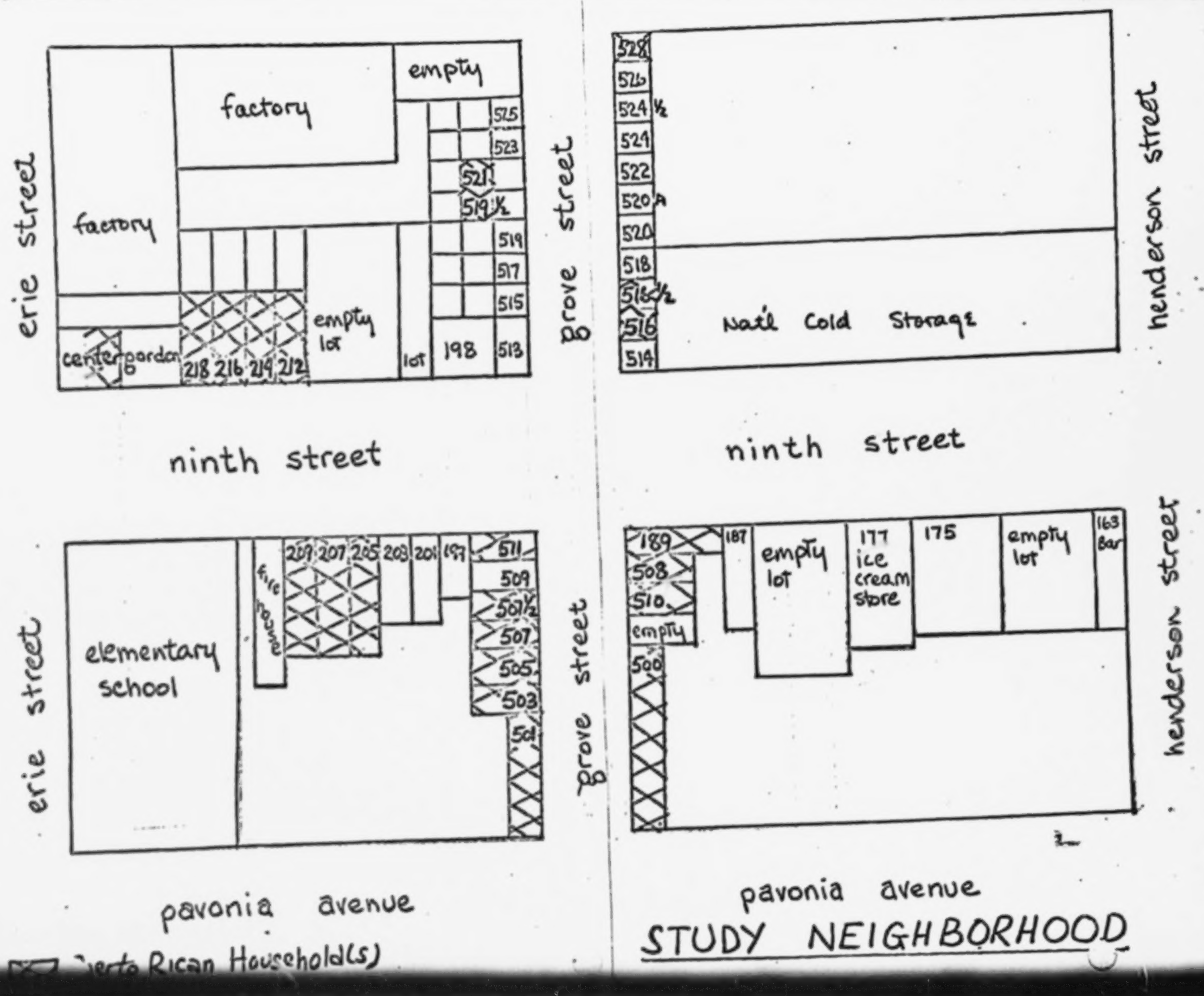
The valid description of "language situations" in various multilingual areas of the world is itself a serious applied problem. All such censuses, surveys and investigations, even the most adequately financed among them, are severely limited in time, funds and manpower relative to the complexity of the task that faces them. All of them must be concerned with selecting from among alternative methods those calculated to yield the most reliable and valid data given research time, research funds and subject time available. It was our constant hope that we might be able to recommend the subset of "best" methods for future language surveys to employ, at least under socio-political circumstances roughly similar to those which obtained in the area and at the time of our work.

Another applied interest of which we were frequently aware is that represented by the teaching of languages in general and by the teaching of languages that are normally utilized in a bilingual context more specifically. In both of these cases valid and insightful sociolinguistic description would not only enable teachers and pupils to recognize the varieties that local communicative appropriateness presupposes, but also to recognize the societal norms that govern the use or non-use of particular varieties between particular (types of) persons in particular (types of) situations. Language instruction is not a particularly successful venture at the present time, even given the simplified assumptions concerning linguistic and role repertoires under which it currently labors. The addition of sociolinguistic sensitivity to the tasks currently facing (and baffling) language teachers may be asking for much more refinement than can normally be handled. Nevertheless, some teachers and some students could doubtlessly strive for and attain sociolinguistic sensitivity (communicative appropriateness) in their respective teaching and learning tasks. They were not altogether forgotten as we collected, analyzed and interpreted our data.

The immediately above comments concerning language learning pertain not only to foreign languages, nor even only to languages that co-occur in multilingual speech communities. The problem of teaching standard English to speakers of non-standard varieties of English certainly requires sociolinguistic sensitivity on the part of teachers and administrators if they are not to commit the error of seeming to wish to estrange students from their normal speech communities. Students and teachers alike must recognize that even speakers of standard English belong to a variety of speech networks and that their usage is not equally and unvaringly standard in each of them. Even native-born teachers of standard English do not always speak that variety of their mother tongue and it alone to all their interlocutors and under all circumstances. They too have come to realize--albeit unconsciously in most cases--that native communicative appropriateness is based upon utilizing a repertoire of varieties of English as the situation demands. It is exactly this kind of sensitivity that speakers of non-standard varieties of English require if standard English is to be added to their linguistic repertoire without pretending to displace entirely those varieties that are already there. It is only the prospect of repertoire expansion (including role repertoire expansion) that can legitimize standard English for those for whom it is thus far little more than a silly abstraction. It was our hope that our work might indirectly contribute to the efforts to describe the usage of speech networks that utilize both standard and non-standard varieties of English.

4. Study Design and Report Design.

Our attempts to devise and interrelate measures of widespread and relatively stable bilingualism focused on a single Puerto Rican neighborhood in Jersey City, New Jersey. On the one block on Ninth Street and on the intersecting two blocks on Grove Street we located some 431 individuals of Puerto Rican birth or extraction. These constituted our target or core population. In order to study them more exhaustively we rented and furnished a walk-up apartment in the study neighborhood. Some of our study team lived there practically all of the four summer months that we required in order to obtain the data we sought. All team members used "the apartment" as their headquarters during their daily data gathering visits. Interviews and tests admin-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510
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187
empty lot
177 ice cream store
175
empty lot
163 Bar
henderson street
pavonia avenue
pavonia avenue
uerto Rican Household(s)

STUDY NEIGHBORHOOD

istered to members of the target population were commonly administered in "the apartment" (since it was sometimes quieter there than in the apartments of our subjects or in the neighborhood anti-poverty center, all of which were frequently available to us for data gathering purposes as needed). "The apartment" was also our equipment storage center, our rest and refreshment center and a place where neighborhood residents--adults and children alike--could, and did, just drop in on us to chat, to have some coffee or some coke.

Our first formal data gathering venture in the study neighborhood was to conduct a language census. As is usually the case when language censuses are conducted our census-takers were still strangers to the target population at the time of the census. This strangeness did not last long after the census was completed, however. Several staff members came to be well known neighborhood "characters" as they trudged around (or sat around on the stoops) with tape recorders of various sizes, as they were invited to dinners, attended funerals, helped rush neighbors to hospitals, baby-sat, fed children whose parents were at work, went to anti-poverty meetings and church services, attended picnics at the beach, made parties for the local children, and, in general, missed no opportunity to interview, to record and to observe.

In addition to our target population three contrast populations were also examined in order that we might understand our Jersey City data more fully. One such contrast population consisted of Puerto Rican intellectuals in the Greater New York Area--writers, singers, artists, poets, musicians, and organizational leaders. Their language performance and their language views enabled us to see our Jersey City respondents in sharper relief. A second contrast population consisted of college oriented high school students of Puerto Rican birth or parentage. These were all members of Aspira (an organization that sponsors clubs in New York City public and parochial high schools) and, as such, they enabled us to understand what was usual and unusual about the Puerto Rican attitudes and behaviors of the less academically oriented youngsters in our Jersey City study neighborhood. Finally, the two Spanish dailies that appear in the New York City area also constituted a study population of sorts for us since we carefully content analyzed their every reference to Puerto Ricans and to the Spanish language during a six month period that included our four month stay in Jersey City. In this fashion we sought to determine what views regarding Puerto Ricans and the Spanish language were impinging upon and possibly influencing our target population during the time of our study.

This report is organized in such a way as to present first most of those studies that essentially provide more general, orienting background from the point of view of our subsequent focus on the study neighborhood and its target population. It is hoped that the ethnographic summary, the newspaper analyses, the interviews with intellectuals, and the study of attitudes and commitments among Aspira members will all enable the reader to grapple more successfully with the data on Jersey City proper which follows.

Studies that are primarily sociological, psychological and linguistic are grouped together and come in the order in which they have just been labeled. Actually, all of these studies are genuinely sociolinguistic in theory and in purpose and their authors were far less concerned with disciplinary labels than with interdisciplinary clarification.

Our report concludes with a statement summarizing our findings, some reflections upon them and upon our experiences, and finally, with copies of the instruments that we constructed and used. Each chapter in the report is written so as to be understandable independently of the others. This has been done so as to facilitate the writing of the chapters--a task undertaken by most staff members almost simultaneously, toward the very end of our time budget--as well as in order to facilitate their publication as separate articles in various professional journals. If the report as a whole appears to merit such treatment it will be rewritten in more integrated fashion for book publication.

It is always a little sad to find, on the completion of many months of work, that what one has learned is less than what needs to be known. Indeed, in the current case, we seem to have progressed primarily in our understanding of how the problem should be put and how its solution should be approached. The future measurement and description of widespread and relatively stable bilingualism in larger populations should benefit as much from our improved understanding of what still needs to be known as from the actual instruments and findings that we present.

Part II

BACKGROUND STUDIES

Chapter
II-1

PUERTO RICANS IN NEW YORK:
A LANGUAGE-RELATED ETHNOGRAPHIC SUMMARY*

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I. INTRODUCTION

A Puerto Rican community has existed in New York for well over one hundred years. Despite the fact that Spain did not permit her colonies to trade with other nations, in 1834 one-quarter of Puerto Rico's trade was with the United States. This necessitated the formation of a Puerto Rican Merchants Association in New York City (Senior, 1965). According to Senior, by 1930 Puerto Ricans were residing in every state including Hawaii and Alaska. Today there are over 900,000 individuals of Puerto Rican birth living in the United States, over 600,000 of whom live in New York City (U.S. Bureau of the Census, 1960).

The very first Puerto Ricans came to this country for purposes of trade. These first few were followed in the nineteenth century by an increasing number of political exiles and anti-Spanish revolutionists.

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In 1898 these exiles saw their Island wrested away from Spain during the Spanish-American War. From that day until the present Puerto Rico has been administered by the United States. As time went on Puerto Ricans were given a greater and greater voice in their own government.

Since 1917, when Congress passed the Organic Act, Puerto Ricans have been citizens of the United States. Migration to the mainland then began to increase rapidly, fluctuating only with the demand for labor in the United States. This migration also helped relieve many of the economic and employment problems of an extremely over-populated island.

During World War II there was an acute demand for labor in the U.S. However, it was not until nearly the war's end that the government made available converted troop transports to carry migrants from Puerto Rico to New York. These persons represented the first large inflow of migrants to the mainland (see Table 1). They became known as the "Marine Tigers" after one of the ships which carried many of them to this new land. Most of these early migrants came to stay (Mills, Goldsen and Senior, 1950, p. 47).

By 1950 the airplane had begun to provide a quick, relatively inexpensive means of traveling from Puerto Rico to the United States. The greatest net migration to the mainland took place during the 1950's (see Table 1). During the early sixties, however, migration began to fluctuate between the mainland and the island. This is partially a result of fluctuating U.S. labor demands (Senior, pp. 72-73) and partially a result of the ever increasing ease with which the trip in either direction can be made. There is evidence of much visiting back and forth between mainland and island residents. In addition, many persons born on the island now express a desire to retire there. This fluctuation may thus also reflect the fulfillment of this desire. The ease and frequency of back and forth travel by Puerto Ricans undoubtedly reinforces the bilingual and bicultural nature of Puerto Rican life in New York.

Table 1

Puerto Rico: Net Migration, To and From
The Conterminous United States, 1944-1965

1944	11,000
1945	13,000
1946	39,911
1947	24,551
1948	32,775
1949	25,698
1950	34,703
1951	52,899
1952	59,103
1953	69,124
1954	21,531
1955	45,464
1956	52,315
1957	37,704
1958	27,690
1959	29,989
1960	16,298
1961	-1,754*
1962	11,664
1963	-5,479*
1964	1,370
1965	16,678

*The minus figure represents a net outflow from the United States to Puerto Rico.

Source: U.S. Immigration and Naturalization Service, San Juan, cited in Senior and Watkins, 1966.

Although this paper will concentrate on language related behavior (and generalizations from these behaviors), it is necessary to provide some demographic and ecological information in order to fully understand the behaviors, situations and values which will be described. In addition, it is extremely important to be aware of the fact that culturally, and linguistically, there is a great amount of variation among Puerto Ricans. Steward's excellent volume (1956) contains studies which point out the wide diversity of sub-cultures which exist on the small island that is Puerto Rico. This point is re-emphasized in a more recent publication by Mintz (1966). One cannot, therefore, assume that Puerto Ricans living on the mainland are from a completely common cultural background.

Furthermore, mainland culture will have differing effects upon different migrants. Puerto Ricans living in the New York Metropolitan area have not all lived there the same length oftime. Attitudes towards race differ in Puerto Rico and on the mainland (see Values, below). Thus a Negro Puerto Rican migrant finds himself in a far more different environment than does the white migrant. Most Puerto Ricans live in concentrated Puerto Rican neighborhoods in the city, while a few live outside the city or in urban areas of lesser Puerto Rican population concentration. The language and behavior of the latter would necessarily also be different from that of the former. In addition, those educated in Puerto Rico prior to 1948 would have been taught in English. After 1948 Spanish became the usual language of instruction in Puerto Rico (Epstein, 1967a, 1967b). This, too, would differently influence Puerto Rican language behavior on the mainland.

Thus the differences among Puerto Ricans in the Greater New York area are many, and this must be kept in mind whenever generalizations are made. Nevertheless, a description of the "typical situation" is still possible. Most of the people taking part in our study were from the lower working class. The population, living in the rundown slums of New York and its suburbs where most Puerto Rican residents of the New York area still live, was generally stable in terms of employment, marriage and neighborhood residence. Some of these families had children in college, but many more had children who were high school drop-outs. A very small number of respondents were educated professional people. Table 2, taken from Social Statistics for Metropolitan New York (Kantrowitz and Pappenfort, 1966), provides a little known comparison between the family income of Puerto Ricans and white non-Puerto Ricans in New York, Northeastern New Jersey and Long Island (the New York-Northeastern New Jersey Standard Consolidated Area).

Table 2

Family Income in 1959 (as a Per Cent of Total Number of Families)

	Puerto Rican	White non-Puerto Rican
All families	100.0	100.0
under $1,000	6.8	2.4
$1,000 to $1,999	9.0	3.3
$2,000 to $2,999	17.3	4.1
$3,000 to $3,999	19.8	6.1
$4,000 to $4,999	15.3	9.0
$5,000 to $5,999	11.3	12.5
$6,000 to $6,999	7.6	11.8
$7,000 to $7,999	4.8	10.2
$8,000 to $8,999	3.0	8.6
$9,000 to $9,999	1.8	6.6
$10,000 and over	3.4	25.4

Source: U.S. Bureau of the Census, 1960, as reported in Kantrowitz and Pappenfort, 1966.

The pages that follow represent an attempt to describe various aspects of the stable and widespread individual and societal bilingualism that characterizes the Puerto Rican community in the largest city in the United States. This attempt is based primarily on two types of data: prior literature, and direct observation and participation.* Since the literature tends to be theoretically oriented and, therefore, inclined toward regular and systematic formulations, we have tried to confront it and correct it and complement it, as far as possible, by specific instances of language usage and social interaction in Puerto Rican neighborhoods in the Greater New York area.

This paper will attempt to characterize the Puerto Rican speech community in New York City and will focus on those aspects of the community--abstract values to actual behaviors--that are most relevant for an understanding of the role of bilingualism among Puerto Ricans in New York. It will start at the highest level of abstraction, the values and norms held by Puerto Ricans in New York (as derived from observed behavior), since such values and norms govern language usage as well as all other behavior. Many generalizations have been advanced about peoples of "Hispanic" cultural backgrounds in the Western Hemisphere (cf. Burma, J.; Christian and Christian, Fernandez-Marina, R.; Gillin, J.; Green, H.; Kluckhohn, F.). However there has been a great deal of American influence in Puerto Rico since the turn of the century; therefore, generalizations about Hispanic values may not all apply to the Puerto Ricans. Nor is "Hispanic" culture probably homogeneous, anyway. Moreover, many members of the Puerto Rican community have been born and raised on the American mainland where they have come in contact with the values and life styles of the dominant core-culture. The recent migrant from Puerto Rico, himself, recognizes the different norms of behavior which are expected in New York (Padilla, 1958, p. 29). All in all, therefore, it is doubly important to check out available generalizations concerning values and life styles by deriving them anew from the actual behaviors and utterances of specifiable individuals and groups of the community under study.

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*cf. Martinez, et al., 1967, for a detailed description of how to conduct a large-scale survey among bilingual lower-class populations utilizing interview schedules administered by local personnel. This type of survey precludes participant-observation and necessitates loss of direct contact between the investigator and the subject population. It does permit investigation of far greater samples than is possible with the techniques of participant-observation used in this study.

A slightly lower level of abstraction, though one that is still highly conceptualized, has been referred to by Fishman as a "domain" (Fishman, 1965). Domains are institutionally relevant spheres of social interaction in which certain value clusters are behaviorally implemented. Domains are similar to the sociologist's "institutions", but are understood in terms of behavior, as well as in terms of structure. Domain analysis in a multilingual setting provides a broader understanding of language usage, because it involves the implementation of the rules of social behavior which are derived from the value clusters of the society being studied. Thus, the crucial connection between abstract value clusters and the more concrete social situations can be made (Fishman, 1968b,in press).

However, at the level of values and domains very little is reportable about the actual processes of social interaction. Few societies, if any, are so structured that there are no alternate patterns of behavior available for the fulfillment of social obligations. The concept of social situation (Gumperz, 1964; Bock, 1964) brings the analysis of societally patterned language and behavior a step closer to face-to-face reality. Situations identify the interaction of individuals who stand in particular role relationships to each other at times and places appropriate for their socio-culturally recognized purposes.

The situation, in turn, assists us in attempting to clarify the role relations of the individuals involved. On a slightly more abstract level than the role relations, but still at the level of social relationships is the analysis of network types (Blom and Gumperz, 1966). Is the relationship between individuals so narrowly defined and based upon so many shared values that alternative relationships between them are excluded (closed networks), or is an alternative set of relationships available to them allowing for a shift in their views of each other (open networks)? In general, information about the interaction between specific pairs of individuals not only brings us closer to the realm of concrete social process but also lends greater certainty to the more abstract societal categories that must be utilized for the study of larger populations.

Thus, three major goals have directed the comments that follow: (a) to enable personal experience ("participant-observation") to sharpen impressions advanced by prior studies as well as to permit prior studies to direct personal observations toward unanswered questions; (b) to proceed from a concern for higher order abstractions to lower order data as well as to utilize direct observation of lower order social interaction to formulate and reformulate higher order abstractions; and (c) to emphasize the intra-group regularities of both bilingualism and biculturism rather than merely their intergroup manifestations, as so many others have done in the past.

This summary was initially intended as a useful guide to the field workers and experimenters who investigated other aspects of a multi-disciplinary attempt to measure and describe Puerto Rican bilingualism in the Greater New York area. Having functioned with a measure of success in that capacity, it is hoped that it can now serve to introduce the report of that multi-disciplinary effort to those readers unfamiliar with the daily life of the largest Puerto Rican community in the world.

II. CULTURAL VALUES

The values of a society are "recognized" by the summation and abstraction of individual bits of behavior even though there may be a wide range of variance for such behavior. An examination of these alternate modes of behavior (and the variant value orientations which they represent) is essential for understanding the dynamics of a society (Kluckhohn, 1953, p. 352). Part of this variation in observed behavior may also be attributable to the conflict created by contact with the dominant non-Puerto Rican culture in New York City.

Neal (1965, p. 9) defines values as "...widely shared conceptions of the good." However, any definition of values should also include widely shared conceptions of what is acceptable or appropriate behavior in differing situations. The values discussed below were arrived at after a review of the literature and by observing a variety of Puerto Ricans from all walks of life at home, at work, at school, and at play. Taped interviews were also used to elicit expressions of preferences and attitudes on a variety of subjects. It is from these kinds of data that we were able to derive the following major value clusters: Strict sex role differentiation; family unity (including kinship and ethnic ties); fatalism (submission to outside forces). Associated with each of these concepts are rules of behavior (expressed and covert) and some image of the ideal--the ideal man and woman, the ideal family, the ideal Puerto Rican and the ideal authority. There is undoubtedly a complex interaction between value clusters.

Thus, employment does more than provide the income to support one's family. Steady employment gives a man dignity and self-respect. The ideal man is an individual with dignity, but he is also part of a well-defined family unit, he is authentically ethnic, and he knows that what will be, will be.

The individual possesses a certain pride or dignity which is not to be taken from him. This is part of the male image in particular. Berle (1958) reports the case of a man who, having attained the status of a shipping clerk, quit when asked to help move cargo. This same feeling of dignity and self-respect is threatened by a working wife or by the need to accept public assistance. Similarly, it is not an approved pattern of behavior to request financial aid from relatives and friends, although one may accept unsolicited gifts from them.

Several sanctions may be imposed upon a man who loses his dignity in the eyes of others. A close relative of one of our respondents is not particularly welcome in the latter's home, though he is never actually denied entrance. The reason given for this unusual attitude is that this man will request financial assistance while strangers are present. Sanctions are not imposed because of the act, but because of the circumstances surrounding it. One of the project's staff members was once present when this man was taken into another room and severely reprimanded by his brother (they are both middle-aged men) for asking for money in the presence of others.

Our Project "diary" contains another illustration of community sensitivity to the norms governing a man's proper role in the community. A young healthy man, who is often out of work, was observed asking a wealthier member of the community for a dollar in order to buy beer. The people present were rather critical of this behavior and seemed embarrassed that it had occurred in the presence of a non-Puerto Rican observer. This man is not denied the privileges of being a member of this community, but he is not well liked because of this perceived lack of self-respect and because of his failure to attempt to provide properly for his family. Thus, in many subtle and obvious ways the community enforces its norms of ideal behavior--in languages as in other matters.

Gumperz diary   June 28

A well dressed person stopped his new car and walked over to the group. Taso told me later he was the owner of a bar on 5th street, a Puerto Rican. When he asked for his brother, who had lived in the house next door, he was told that the brother had just moved. Frankie addressed him in English; the others responded to him in Spanish. When he walked away Frankie called to him in Spanish, "How about a dollar for some beer?". He turned around and said to Frankie in Spanish, "A young man like you ought to be able to work." With a disgusted look he peeled off a dollar from a big roll, tossed it to Frankie, and walked away. The others seemed embarrassed and were quite critical of Frankie.

Sex Role Differentiation.* At this level of analysis it is not so important to see how sex roles differ as to establish the fact that they do differ. Most researchers have recorded that the Puerto Rican male is dominant and the female submissive (Padilla, 1958; Seda Bonilla, 1958; Stycos, 1955). It has even been suggested that there is a female "martyr complex" because within the family the male child is reported to have higher prestige while affection is centered on the mother (Fernandez-Marina, 1958).

Padilla and Seda Bonilla have recorded lists of ideal male and female types. Self reported life goals of male migrants include being brave and assertive and letting no one take advantage of oneself (Padilla, p. 57). Our own male respondents often reported that a knowledge of English would improve their ability to discharge male responsibilities in the midst of the English speaking dominant culture.

Dignity and respect are the greatest virtues a man may possess (Seda Bonilla, p. 39). It is felt that dignity and respect may be threatened if a man's machismo (manliness, virility) is questioned. These three conceptual ideals are the basis for much discussion among men in any given friendship circle. Machismo includes a degree of sexual aggressiveness in word and deed. Hill, et al. (1965, p. 105) came to the conclusion that machismo exists more by reputation than in fact in Puerto Rico. This being so, language would play a major role in maintaining this ideal. Spanish is the language for in-group boasting of sexual prowess among men. Comments which are thrown out to a passing woman are almost always in Spanish, even if the woman is not Puerto Rican.

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*This aspect of Puerto Rican life will be examined again in our discussion of role relations below.

It is commonly believed by male Puerto Rican adolescents that they are better at "sweet-talking" girls than are boys of other ethnic groups. A youth who does not appear to be interested in girls may be suspected by his parents of being unmanly. Parents encourage their sons to take an interest in girls so that their sons will conform to the accepted male norms.

In contrast to the accepted behavior of men, young girls are ideally cloistered and protected from the attention of the opposite sex. Virginity in an unmarried girl is highly valued. Although most of the men in Stycos' study report having had sexual experiences before marriage, it was rarely with a virgin (1955, p. 78). Many of these same respondents declared that they would leave their newly wed brides were they to discover that they (the brides) had concealed their lack of virginity from them.

> Ma diary July 20
>
> She was very quiet and shy, talking only when I asked her questions or made comments on the children, even though her English is quite good and there was no communication problem. She graduated through 9th grade. She has been looking for a job in J.C. and looks forward to finding one so she can get a chance to "get out" since her husband is reluctant to let her out, even to visit her younger unmarried sister at their stepparents' house.

Many of our teenage respondents are experiencing a great deal of conflict due to the traditional concept of strict sex role differentiation. Boys will argue over whether or not they want to marry an educated girl and whether or not they will allow her to work at her profession. As more girls do become educated this problem will increase. Girls who are in contact with the dominant American culture all desire the freedom of movement without chaperones that their American friends have.

This conflict is often resolved by a compromise. Most Puerto Rican girls report that they do not openly defy their parents. This would create an irreparable family rift which is not desired. Instead they lead their parents to believe that they are adequately supervised by school officials or by a friend's mother, when in fact they are off at the movies or out bowling like any other American teenager. There is no doubt that the Puerto Rican girl who is raised in New York has more freedom than girls raised in Puerto Rico. Nevertheless, parents express great concern about their daughters and it is not uncommon that a fifteen or sixteen year old girl be escorted to and from a party by an older relative. However, it is no longer common for parents to chaperone their daughter during the party itself.

One finds the strictest interpretations of traditional norms governing male-female behavior among those of the Pentecostal faith. One of our respondents, a Pentecostal minister, discussed his dislike of American norms (of sex-role differentiation) at great length. His great concern was that Puerto Rican women have begun to behave like other American women. And indeed, outside the house where we talked women wore slacks and talked back to the men, and young couples walked by arm in arm, with no chaperone in sight. The growing similarity between male and female roles is accompanied by growing female mastery of English.

Another clash or compromise between Puerto Rican and American value systems reveals itself in the preference for marriage partners noted by Padilla (pp. 37-38). The man who has been raised in New York is frequently seen as a potentially better husband than a man from the island. It is believed he will be more faithful and will help around the house. On the other hand, it is not unusual for young men to be found courting middle-aged recent migrants, as they are expected to be better homemakers (subordinate to the demands of home and family) than are girls who have been born in New York. It thus appears that though sex-role differentiation is still a recognizable value cluster for New York Puerto Ricans, the role definitions are changing as is the distance between them and compartmentalization within them. English is the language of sex-roles that are dependent on the larger society. Spanish is the language of the sex-roles that are more traditional, more basic and more idealized. Thus at this point, men require both languages and women are beginning to require both as well.

Family, Kinship and Ethnic Ties. This value cluster is another noticeable regulator of behavior in the Puerto Rican community. Kinship and ethnic ties represent a means of self identification. The presence of real ties (obligations) between individuals indicates the common group membership of those individuals. Conversely, kinship and ethnic identification is used as a mechanism to define common group membership and therefore the possibility of mutual obligations. Padilla describes such a mechanism which operates when Puerto Ricans are introduced to each other. If they are acquainted with the same village, barrio or individuals in Puerto Rico, stronger ties are then felt to exist between them. We often observed this mechanism of identification in operation whenever a Puerto Rican staff member accompanied us on our interviews. Our own entrance into a home was greatly facilitated if the family being visited and our Puerto Rican colleague were from the same hometown or were acquainted with the same persons in Puerto Rico.

> Ma Diary   Aug 12-14
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> Around 3 PM I accompanied Juanita and Pedro Sanchez Jr. to the hospital to see Norma, who was recovering from a foot infection. In the visitors' room, Juanita talked with all the PR mothers whose children had various ailments and brokens. She seemed to know all their histories; when I pointed out that a number of other (non-PR) children also had similar conditions, it was as though she was unaware of it before and just noticed it for the first time. I have noticed similar reactions on other occasions: If the situation involves anyone who is PR, Juanita will look, pay attention to it and comment or join the conversations, i.e., become involved in the situation. If it does not involve someone Puerto Rican, she shows little concern or interest. It is as though being Puerto Rican constitutes a closed-circuit communication channel between members. Does this mean that topic or setting are always subordinate to identity of listener? Spanish is always predictable in such situations. (This does not preclude there being phonologically assimilated loan words, loan blends in such conversations.) While we were with Norma, Pedro had to sit outside in the lobby as the hospital doesn't allow visitors under 18 into the children's ward. I checked with him from time to time - he was busy talking (English) to other PR children his own age. I overheard one of them asking him "Is that you sister". Were they identifying me as PR simply because I seemed to be operating in a family-type situation (i.e., couldn't they imagine that I might be just a good friend?).

A close circle of friends provides security in time of need, particularly security for one's family. A childless marriage is highly exceptional, and "family" itself is largely defined in terms of one's children. Berle reports that before a man will entertain marriage with a woman who has had a tubal ligation she must first undergo the reverse operation. She also reports (1958, p. 135) a case where the pregnancy of an unwed girl is viewed --at least in part-- as a happy and desired condition. Though this would appear to be contrary to the ideal of extreme isolation and protection of unmarried girls, it is consistent with the value Puerto Ricans place on children. It may also represent a difference in cultural definition of marriage, since an unmarried girl living in stable consensual union is not necessarily violating Puerto Rican values. Berle's statement that women with large families often welcome an additional pregnancy may also be viewed as possibly representing a rationalization of two opposing values. Stycos (1955) points out that a woman in Puerto Rico usually does not question her husband's wishes, and he may not consider the extra burden that an additional child represents.

Cultural norms require that a man's primary responsibility be to his children. If a woman discovers her husband's extra-marital affairs she can demand his fidelity by appeal to these norms (Padilla, 1958, p. 105). A "good man" is one who supports his wife and children, including those (children) of a previous marriage, even if his other faults (e.g., jealousy and bad temper) are great (Padilla, 1958, p. 150). It is not uncommon for a man to send money to children of a previous marriage though it creates hardships for his present family.

Ethnic identity for the Puerto Rican also centers around his affection for, and awareness of, the island, the locus of his extended kin system. Today's quick, inexpensive air travel allows for frequent visits to relatives in Puerto Rico. Most working class adults with whom we talked expressed the desire to return to the island of their birth to retire. The American born children of these people ordinarily had no desire to live in Puerto Rico permanently, but they were all eager to visit as often as possible. Everyone talked about the beauty of Puerto Rico with a great deal of nostalgia, and all agreed that maintenance of Spanish was one important means of retaining contact with its people and the feelings it evokes in those who are living there. Adult respondents decried the poor Spanish facility of their children as a barrier to interaction with family and friends in Puerto Rico, for how else could they maintain contacts with the island and its people?

To desire language maintenance is not by itself sufficient to realize the goal. However, maintenance of Spanish is a reality among adult New York Puerto Ricans because they do associate the language with this most important value cluster--family, kinship and ethnic ties. Spanish is the language of the home, and is used almost exclusively with infants in even the most Americanized homes. In addition, Puerto Ricans in New York are far closer to those who were left behind than any other group of people who have settled among us. For the youngsters, with whom the responsibility of language maintenance utlimately lies, Spanish is not only necessary for conversation with aged grandparents, but also with younger relatives in Puerto Rico who frequently visit and who are frequently visited.

Puerto Rican attitudes toward race differ from those on the mainland. Within any family there may exist a wide variety of skin color and other racial features. Because of this, and because most informants had a definite grasp of the difference between Puerto Rican and American attitudes, greater acceptance across color lines can be considered another aspect of the primacy of ethnic identification.

Whites in Puerto Rico do have more social opportunity than do Negroes, but the situation is more complicated than it might appear at first blush. To begin with, the strict black-white dichotomy that exists in the United States is not made in Puerto Rico. Three broad levels of color are recognized; yet the same strict divisions--black, colored, white--which are made in South Africa do not exist. There appears to be a continuum*, using the criteria of color, physical features and hair texture. Another important difference is that in Puerto Rico race is a matter of appearance rather than ancestry (Padilla, p. 73). As a result it is open to reinterpretation as other characteristics of an individual undergo change (e.g., education, income, etc.). The racial distribution in Puerto Rico includes Caucasians, Negroes, people of substantial indigenous Indian ancestry, and various degrees and kinds of racial mixture between them. However, it must be remembered that the traditional social structure in Puerto Rico placed wealth and power in the hands of the "white" descendants of the Spanish. The Indians, and the Negroes imported from Africa, were slaves used to work the plantations. Therefore when slavery was abolished in the nineteenth century the Negro (and Negro-Indian) were at the bottom of the socio-economic ladder. Today it is possible to find people from all parts of the racial continuum at all levels of society, although the balance is still clearly in favor of the whites at the top.

There is certainly evidence of some racial discrimination among Puerto Ricans in New York, especially as concerns marriage. Many adolescents state that their parents encourage them to date persons who are lighter than themselves. One rationalization these youngsters give is that their parents are only reflecting the mores of the dominant American culture. With all due credit to these youngsters, and despite their parents' wishes to the contrary, we have observed many parties and social gatherings which were thoroughly mixed racially.

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*Though terminology --trigueño, pardo, prieto, triste de color, molleto, grifo, moreno, jabao, etc.,--suggests divisions of some kind.

Nevertheless, attitudes and discriminatory practices on the mainland have an effect upon the behavior of the white and black Puerto Ricans living here. In the absence of the reinforcing presence of the island social structure, the attitudes of the white Puerto Rican slowly change to conform with those on the mainland. On the other hand, the strength of ethnic and kinship ties serve to offset this drift.

Padilla (1958) suggests that in New York the Negro Puerto Rican often identifies more strongly with the Spanish community than does the lighter Puerto Rican. The former is aware of mainland discrimination against Negroes and tries to avoid this through Hispanic identification. The same kind and degree of discrimination does not exist within the Puerto Rican community as exists outside of it. Seda Bonilla (1958) suggests that the opposite trend obtains--that is, that darker Puerto Ricans more rapidly withdraw from the Puerto Rican community and enter that of the American Negro.

Our own observations indicate that instances of both processes are not uncommon. By identifying with the Negro community a dark Puerto Rican only has one battle to fight instead of two. In addition the greater militancy of the Negroes and their greater recognition via poverty and civil rights agencies has also attracted many dark skinned, lower class Puerto Ricans to Negro associations and identifications.

Spanish is the language of family and ethnic ties. Since the family in Puerto Rico is always near at hand the loss of Spanish is viewed as an unnatural and tragic rupture. The increasingly numerous "new generation" may make it necessary to temper this view.

Fatalism.* Most studies reporting on Puerto Rican values and beliefs state that chance and destiny are believed to play a large part in determining life's direction. This orientation has also been reported for most other Hispanic groups. Kluckhohn contrasts this Fatalistic, Present Time, Being (existing) orientation of the Spanish-Americans in the Southwest to the Individualistic, Future, Doing orientation of the Anglo-Americans. "...Control over the individual's life is to a great extent tangible, external and absolute" (Christian and Christian, 1966, p. 303). Therefore, a man can blame his failures on bad luck. Illness, poor economic conditions, or misbehavior of children are beyond one's control, especially if one has tried to overcome them and has failed (Padilla, 1958, p. 124). If a man is convinced that he is ill, his dignity is no longer endangered by his unemployment, even if his unemployability is unrelated to his illness (Berle, 1958, p. 205).

Anyone can appeal to God, the Virgin and the Saints, as external controlling forces. Similarly, belief in the Spirits, another type of external force is not restricted to the members of any one church. This is true despite the fact that some respondents, Protestant and Catholic, believe that one cannot be both a Spiritist and a Christian.

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*Although "fatalism", because of its negative connotations, may not be the most accurate description of this value cluster, it is the one most widely used in the literature.

However, many Spiritists also belong to an organized Church as well. Evidence of the widespread belief in spirits is found in the number of little shops in Puerto Rican neighborhoods which sell the herbs and amulets prescribed by the Spiritists. There is some possibility that length of residence on the mainland or socio-economic level are variables related to faith in the local healers and in the Spiritists.

Mintz (1966, pp. 338-400) refers to a study of Puerto Rican values by Jane Collier which helps put this value orientation into a more positive light. Nowhere does the study refer to fatalism as such. However, it says that the Puerto Rican sees the supernatural and his social world as being orderly and well structured. The church is well organized. Comfort is found in the determinate structure of religion, rather than because of any deep knowledge of theology. Even the action of the Spirits are governed by laws which are only known to a few "gifted" persons.

Social behavior is also governed by well ordered rules. Obviously there are many alternate modes of behavior in any given situation. However, Collier concludes that Puerto Ricans are most at ease when they can operate within certain well defined norms of behavior. The relevance that this has to language behavior is obvious. The more one functions within the Puerto Rican value system, the more he would be compelled to speak the language or language variants required by that system. As a person moves farther away from an exclusively Puerto Rican value orientation his freedom of language choice increases, subject only to the constraints imposed by new value orientations.

Fatalistic views interact in a complicated way with language. Spirits and forces are obviously beyond man's control by language be it English or Spanish. However, human organizations that seek to cope with these forces are language imbedded. The more formal these organizations, the more likely they are to be conducted in English. The more informal, spontaneous and intimate, the more likely they are to be conducted in Spanish. However, since all-pervading fatalism appears to be more basically associated with Spanish than with English, Spanish is often predominant, even in the formality of organizations such as the church. In general, fatalism tends to depress social mobility exertions and has a decided influence on the learning of English and on the rate of moving out of old Puerto Rican neighborhoods. Thus, fatalism may underlie much of the integration of behavior and outlook on which the continued existence of separate Puerto Rican population concentrations depends.

III. DOMAINS

The identification of where and when it is appropriate for particular topics to be discussed by particular persons further delineates the aggregates within which Puerto Ricans in New York interact. Domains are broad institutional and functional categories, which are closer to reality than are values, in that they represent an attempt (albeit a highly abstract one) to differentiate between verbalized values and those values expressed in actual behavior. "Whereas particular speech acts can be apportioned to the speech events and social situations in which they transpire the same cannot be done with respect to such acts in relation to societal domains. Domains are extrapolated from the data of 'talk' rather than being an actual component of the process of talk. However, domains are as real as the very social institutions of a speech community, and, indeed, they show a marked paralleling with such major institutions (Barker, 1947) and the somewhat varied situations that are congruent with them. There is an undeniable difference between the social institution 'the family' and any particular family, but there is no doubt that the societal regularities concerning the former must be derived from many instances of the latter. Once such societal regularities are formulated or derived they can be utilized to test predictions concerning the distribution of societally patterned variation in 'talk'"(Fishman, 1968b, in press).

For a socio-linguistic study it is useful to begin with a simple dichotomy which separates one's interactions with Puerto Ricans and non-Puerto Ricans. Of the seven domains described below, Home, Neighborhood and Voluntary Organizations ordinarily remain almost entirely within the Puerto Rican community. Interactions within the domain of Officialdom is rarely with other Puerto Ricans, although this is now changing as more Puerto Rican community action groups are being established. Education, Religion and Work present a more mixed interaction depending upon a number of factors that will be described below.

1. The Home can be considered a domain within the Puerto Rican community. Behind the doors of one's home, a man can relax with his close kin, enjoy his meals, discipline his children and entertain his friends. Friends are valued because they are to be trusted. Persons outside this circle--salesmen, welfare officials, social scientists--may be admitted, but they do not join into the same social intercourse as do those within the circle. However to equate the family alone with a domain would be to define the latter too narrowly, because intimacies within the immediate family (kinship group) are also shared with friends and relatives as well. Topics relating to the functioning of the

family--child rearing, health, finances, food, etc.--are kept within this circle whenever possible.This may be another reason for the reluctance that Puerto Ricans reveal toward accepting public assistance. A family which is the recipient of public assistance must share intimacies with others outside the extended family domain.

> Ma diary Aug 12-14
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> When we returned, the Sanchez apartment was full of people, men playing dominoes, in the kitchen while Irma (Juanita's friend from 6th St.) was cooking arroz con pollo and trying to get everyone fed as the children were underfoot everywhere--it was a picture of happy, busy disorder.

The home plays an important role in a Puerto Rican's life. This is where he raises his family and entertains his friends. Informal, unannounced visits to close friends and relatives are not infrequent. When one visits a Puerto-Rican home it is invariably filled with the friends and relatives of the husband, the wife or the children. At the slightest excuse--a birthday, a baptism or the arrival of visitors from Puerto Rico--a party is arranged. Only for a wedding, when more people must be invited, is the celebration held outside the home.

The home thus functions as a center for intimacy and trust. The dignity so very important for a man's self image is under less threat among intimates. Personal interactions, where status differences become less important, are most frequent in this domain. It is here that one most often takes the opportunity to practice English without fear of ridicule. More liberties can be taken with language style and variety, as well as with other signs "given off" (appearance, gesture, etc.; Goffman, 1959).

Ma diary June 20

During all this, in fact throughout the whole visit, kids kept coming in and out, exchanging short conversations with Taso, in Spanish. Whenever there is a knock on the door, if Taso is there, he yells out, "Come in!"; whereas Ana will say, "Quién?". Most of the kids don't bother to knock.

Our observations and interviews revealed that most Puerto Ricans (in the lower class community studied) do recognize the existence, at least, of a more formal variety of Spanish different from that of their own normal use. Some claim control of this other variety, others do not. Those who do claim control of the formal variety report using it when talking to Spaniards or South Americans, or when talking to persons with more education than they themselves possess. There were a very few persons in the community who were experiencing rapid upward mobility. These persons looked down at the variety of Spanish spoken by most Puerto Ricans and claimed not to use it themselves, nor to teach it to their children. However, for most people this was the variety they used in their most meaningful relationships with family and friend. To deny the correctness of their language would impute meaninglessness to these relationships and to the cultural values surrounding them.

2. Outside the home the Neighborhood appears to be an important domain for social interaction. It differs from the Home domain in that it includes a greater variety of persons and activities. This is particularly important for these women who rarely go further from home than their immediate neighborhood. While a woman is shopping in the local "bodega" (grocery) or taking her children to school,

she has an opportunity to gossip about events and people in the neighborhood (or in Puerto Rico) with other women. Men will generally be found on the sidewalks playing dominoes or cards during the warm weather. The topic of discussion in these male groups will generally concern male prestige and related exploits. During the day when the women are shopping there are always some men around who are either out of work, or who work in the neighborhood. After dinner, when a woman's household tasks are through she may join the men on the street, just to get out of a stuffy apartment.

There may be need to subdivide the Neighborhood domain further by age and sex because it is obvious that certain topics are inappropriate when certain persons are present. Furthermore, the pattern of behavior described above is more common among lower-class than among middle-class Puerto Ricans.* It does appear that for the lower class the Neighborhood domain would include persons not included in the family or home and would be restricted to topics of a more general and less intimate nature. Thus, while talk of sex and other intimacies does occur within the home between the sexes in some very close lower-class families, the members of these families restrict such discussions to all male or all female groups when interacting in the neighborhood. All in all, the Neighborhood domain permits more intragroup use of English than does the home although it is still primarily a Spanish situational context.

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*The upwardly mobile family still living in the slum severely restricts its interaction with the neighborhood. These persons enter few if any friendship circles with their neighbors and remain living in the lower class neighborhoods only as a means of saving toward the acquisition of better housing elsewhere. More "comfortable" Puerto Rican neighborhoods reveal less of a neighborhood domain in accord with more general urban American norms.

Puerto Rican and non-Puerto Rican school-age children certainly associate with each other in the streets (and even in the home). Adults do so, too, but not as much as do the children. Many Puerto Rican adults do not shop exclusively in the bodegas, but use them at night and on Sunday when the less expensive supermarkets are closed. This means that much of the communication while shopping must be in English, unless the local shopkeepers hire Spanish-speaking help. Thus Puerto Ricans find themselves shoulder to shoulder with their monolingual English speaking neighbors while shopping and walking the neighborhood streets.

The extent of friendship between Spanish and English speaking neighbors varies. One respondent frequents a favorite bar with his co-workers who are non-Puerto Rican. Others socialize very little with Americans. Women are often seen admiring each others' children; and among the women, as with the men, strong friendships, rare as they are, do develop.

During the warmer months the street becomes a haven from the close heat of the apartment. Small knots of people will be seen on streetcorners and on stoops playing guitars, singing softly, playing dominoes, or just talking. Most often these groups are exclusively Puerto Rican. Only occasionally does one see a non-Puerto Rican amongst the others; when this does occur it is usually when the group is composed of young people in their late teens and early twenties.

As in the home, ethnic and kinship relationships are in evidence in the neighborhood. Most of our respondents living in widely scattered neighborhoods of the New York Metropolitan area maintain their residence in the vicinity of their ritual kin if not in the area of their blood relatives. However, friendship patterns in any given group (block, neighborhood, city, etc.) is better described as a network than as a circle. This means that while rules for behavior among friends do operate in the neighborhood one is nevertheless not always as free as when at home. For this reason, an observer may only hear polite forms spoken between ritual kin (compadrazgo relations are explained in the following section).* Among many Puerto Ricans it is not improper to joke with your compadre, though respect for the man requires that this not be done when strangers are present. Polite speech forms may also follow this same pattern. In any event, the neighborhood does allow latitude for more language and variety switching than does the home.

3. Education is another domain, separate and distinct from the home and from the neighborhood although it is a topic of discussion in both. All our adult respondents expressed concern about their children's progress in school. Grades and classroom discipline are frequent educational topics of parent-child discussions at home. A few youngsters report that their parents take an interest in the school work itself. Depth discussions of education between high school and college students and their parents are generally conducted primarily in English, the language of edcuation.

The distinction should be made between a child's interaction with the teacher (and with fellow students and even his parents on educational matters) and his parent's interaction with the teacher or other school officers. For the child there is appropriately defined behavior for the Education domain. For the lower-class parent there is no such defined behavior. For such parents interaction with teachers and principals seems to belong to the domain of officialdom (see below). Perhaps this logic does not hold for the middle-class Puerto Rican who feels more at ease interacting with the bureaucracy of the dominant culture and for whom education per se is (or is conceivably) a personal experience with meaningful role relationships.

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*Many respondents have indicated that the traditional norms governing this relationship are no longer in effect.

4. A related domain is that of Officialdom (and bureaucracy) which include all the health, welfare, education, and other services available in the city. Most people have occasion to interact with teachers, policemen, social workers, telephone installers, etc., at some time during their residence in New York. The encounter is usually brief, in English, and is restricted to the particular business at hand. It is still an inter-group domain--almost without exception and its technicalities normally require the use of English. This is often true even when the clerk, official, etc., is himself Puerto Rican (cf. Social Situations, below).

5. The domain of Religion is separate again from the family, but it is more a part of the Puerto Rican community than is the domain of officialdom. The Pentecostal ministers are themselves Puerto Rican, while the Catholic Church makes an effort at least to have Spanish-speaking priests assigned to predominantly Puerto Rican parishes. Religion is a serious matter (even in non-observance) for it represents a well ordered segment of an often chaotic existence; and relations with clergy are normally restricted to religious matters (except when

priests make an effort to be involved in community affairs). Religion is also a personal matter and church membership does not necessarily coincide with kinship groupings. Father, mother and children may all belong to different churches, or if the church has both Spanish and English services parents may attend the former and the children the latter.

> Ma diary Aug 12-14
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> Sunday morning I went to Spanish mass (half hour long) at 10 a.m. with Pedro Jr. The service seemed poorly attended, with less than 1/3 of the seats filled. Three groups of worshippers seemed to attend: unaccompanied children, mostly girls under 14; mothers with younger children; older couples. Then there was a scattering of adults, many unaccompanied, of all ages. What was most noticeable was that there were few complete family groups as such. I later asked a few of the parents in our building whether they went to church and how often; the usual replies were "sometimes" or "yes, we go on special occasions." It might be interesting to compare these observations with the self-reports of the survey. I didn't see anybody from our apartment house there, except for some of the children. As for the general neighborhood, it was hard to tell, since I personally know so few of them.

Among our respondents church was not well attended except during Christmas and for Baptismal ceremonies. Women usually attended more regularly than did men (another indication of sex-role differentiation).*

6. It has already been noted that one relaxes at home with friends and relatives, as well as with neighbors on the street. However, there

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*There were, of course, exceptions to this, most notably among our Pentecostal respondents who often attended two services a week and brought the entire family. A few Catholic families also attended church regularly.

are also more organized forms of recreation. Store front social clubs are very common in every Puerto Rican neighborhood; and there are other forms of organized recreation sponsored by unions, political clubs, etc. However, in contrast to the Neighborhood domain in which recreation is casual and unorganized, the domain of Voluntary Organizations is more structured and organized. Most of these organizations are Hometown Clubs, membership being restricted to persons born in particular towns in Puerto Rico.

The store front clubs are stocked with beer and coke, dominoes, and sometimes a juke-box and a pool table. The clubs also sponsor a number of big dances, trips and picnics during the year. Churches also sponsor similar activities, especially the Pentecostal churches which are particularly active along these lines (except for dances). Most Pentecostal churches even sponsor their own band which plays for entertainment, as well as for the service. Most activities are family affairs, for it is not uncommon to see very small children fast asleep in their mother's arms at 2 or 3 a.m. on Sunday mornings, on buses in Puerto Rican neighborhoods on the Lower East Side. Language usage in Voluntary Organizations shows a wider range than in either home or neighborhood since some organizations deal with inter-group problems, demands and actions.

7. Finally, there is the sphere of Work, the linguistic and behavioral realizations of which are quite varied, depending on whether work is within or outside the Puerto Rican community, whether there is contact with non-Puerto Rican superiors directly or through intermediaries, whether or not there is need for advanced technical skill, and whether or not there is a need to be bilingual with customers or

clients. Many of these variables may in turn relate to the socioeconomic level of the occupation.

> Gumperz diary June 29
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> He'd like to get a better job and wants to learn more English to help him. He says he knows only the English "of the streets". He is forced to speak English at his job because most of his coworkers are Negroes. There are a few other Puerto Ricans, but he is discouraged from speaking Spanish to them because the boss doesn't like it. They might be saying something behind his back.

It is in the sphere of work that most persons must use English. Few persons are employed in situations which do not put them in contact with monolingual English speakers. Even women, who claim not to speak English, often work side by side with non-Puerto Ricans. The work sphere often requires English even when it is in an intragroup context. The specialized terminology of most jobs, the governmental and union regulations that apply to work, the relevance of work to social welfare, the connection between work and societal position all imply the need for English the more Puerto Ricans recognize the work sphere for their own purposes.

IV. ROLE RELATIONSHIPS

Gumperz defines "social relationships" as "statuses defined in terms of rights and obligations." (Gumperz, 1964, p. 139). Any one individual necessarily interacts with many others and is therefore involved in many role relations: child-parent, child-peer, child-teacher, etc. This section will attempt to describe the major role relationships among Puerto Ricans in New York City and list the rights and obligations for each.

The bonds of obligation start with the nuclear family and extend out in concentric rings to close consanguinel kin, ritual kin and close friends and other relatives. It is apparent that kinship ties are important, and that a man's prestige is, in part, measured by the number of ritual kinship relations (co-parents) he has (Mintz, 1960; Mintz and Wolf, 1950).

Family Role Relationships

Further evidence that the nuclear family is at the center of a man's obligations follows from the fact that this is the preferred pattern of co-residence in New York (Padilla, 1958), and in Puerto Rico (Mintz, 1960).* The authority of a household lies in the married unit and one follows the central authority of the household in which one is living. Thus if a woman co-resides with her married male child, the child still retains authority over household affairs. Authority remains with the parent if the married children live in the parents' household (Padilla, 1958, p. 127).

Reports indicate that a parent will relinquish the care of a child to friends or relatives if they are in a better position to care for it (Berle, 1958; Lewis, 1966; Padilla, 1958). However, a distinction must be made between a child who is temporarily placed with another family (even if it may be so placed for years) and a child who is permanently living with a new family. The distinction is recognized by referring to the child as son or daughter in the latter situation, but not in the former. The two situations are analogous to the distinction between foster home placement and legal adoption, except that Puerto Ricans in New York prefer to avoid official channels and place their children with people whom they know and trust on terms of mutual agreement.

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*It must be emphasized that Puerto Ricans in New York, as well as on the island, recognize a marriage if the man and woman are living together in a stable consensual union. New York law does not recognize common law marriage.

It appears that obligations to kin outside the nuclear family do not extend to outright support, though help is expected during times of stress. A recent migrant often boards with a relative already living in New York. His host may be expected to help the newcomer find lodgings and employment. This should be accomplished as quickly as possible at which point the newcomer will move out. During the man's stay he is expected the recognize the authority of his host. He is never required to pay for his lodgings, but may buy gifts for the children and help with some of the household expenses (Padilla, 1958).

Nuclear households are the rule. Joint families (two or more related nuclear families living in the same household) are rare, and United families with a very strong sense of responsibility to each other are an ideal rarely attained (Padilla, 1958, p. 118). Berle (1958, pp. 87-88) observed a reluctance for children to move out of the slums and away from their parents, even when they were able to do so. On the other hand, Padilla did note a tendency for children to seek upward mobility by getting out of the slums. It is the environment which works against the concept of the United family. A man can easily be pulled under by the weight of his poorer relatives in New York were he to allow it. However, a system of balances does exist. A man who is helped by a friend or relative is expected to repay his benefactor when he can, and should show his gratitude by his attitude, by visits, small gifts, and verbal acknowledgment to others of his benefactor's worthiness.

Both within the household and within the family the father of the house is the traditional authority. Decisions concerning the discipline and functioning of the household are his. Ideally, the father should be the breadwinner, while the woman's role includes caring for the children and managing the daily household affairs. In all matters, however, she is subordinate to her husband. The father is not only responsible for bringing home his weekly salary, but also for its allocation. In fact he may even shop for the weekly staples, as well as for other needs of the family including clothing, furniture, etc. His wife (or the children) shop for the daily perishables, milk, eggs, meat, etc.

Aside from shopping the men are not expected to do any housework. Furthermore, the father of the household has certain privileges other members do not have. He may come and go at will, whereas mother and children (especially female children) must account for their activities. It is not required that a man notify his wife that he has been invited to dinner at a friend's home. She will have prepared dinner for the family anyway and will put a portion aside in the event he is hungry when he returns. A man is also expected to spend a greater part of the family income on personal recreation and dress than do other members of the family (Padilla, 1958, p. 152). The woman's role more usually restricts her to the home so that she can more fully discharge her prime responsibility to her husband's and family's daily needs. This is particularly true in working class families--whether or not the women work.

Hoffman diary July 31

Hector's wife is now working in the laundry to help him catch up on his bills. Today was her first day. It was 6:30 p.m. and she had not yet returned to cook dinner. Hector was hungry. She may have to quit working if this continues. He said that he can cook, but would not consider doing so. His wife's sister was caring for the two children.

Although a woman's role ideally requires her to stay home and care for the family, this is not always possible. It is often necessary that the woman work in order to supplement her husband's income or to provide the family's total income when her husband is unable to do so.* In those instances where the wife is employed and the husband is not, he may care for the children and even cook. However, more often than not the children will be placed in the care of a female neighbor or relative, and the preparation of dinner will await the wife's return from work. We observed only one male who would cook and clean when he had been laid off and his wife was still working. Indeed, one man wanted his wife to quit her new job because she was coming home past his usual dinner time, even though they badly needed the money.

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*It should be noted that there is a precedent among certain groups of Puerto Ricans for women to take jobs, to lead public lives, and to be assertive. Thus, many towns in Puerto Rico have and have had women mayors. There are several Puerto Rican women in positions of responsibility in anti-poverty and social welfare agencies in New York City. It is believed that this tradition among the middle- and upper-classes has made it easier for lower-class women to seek work when it becomes necessary to do so.

The preceding discussion helps explain the linguistic patterns we have observed among Puerto Ricans. It was first thought that a woman's competence in English was poor because she was cloistered and had no opportunity to use English whereas a man's freedom provided him with the opportunity to speak English in a great many more situations. However, this has turned out to be only partially true. Although a woman's bilingual competence is generally not as good as a man's, she can generally speak English better than she or her husband will admit. It is only after investigators get to know a family quite well that the woman of the house will speak with them directly rather than through an intermediary. As they become accepted into the network of close friends the family will no longer be embarrassed by her accent, her limited vocabulary, or by her non-traditional, work-derived language skills. A good woman is not expected to communicate with persons outside the family (especially males) except when it is absolutely necessary.

> Ma diary July 18
>
> In general, these children take on a lot of responsibility, not only helping their mother with housework, but also caring for the babies, doing such chores as feeding, changing diapers, putting them to sleep, constantly picking them up whenever they cry and always giving them attention.

A child is expected to respect his parents throughout his life. Nevertheless an interesting mechanism accounts for changes in relative statuses as a child grows to adulthood. A number of adult respondents indicated that they made suggestions, rather than demands in relation to their children's desires to quit school. Thus the children were not put in a position of having to disobey a parental order when they did leave school. One respondent reported that he would expect his grown sons to heed his counsel, but they would be under no obligation to do so. Daughters are given much less freedom of choice than sons.

Kinship and Friendship Role Relationships

Relatives and ritual kin (a child's godparent is his parents' co-parent) may be expected to support a kinsman's child only in the event that his own parents are unable to do so. Otherwise their responsibility is restricted to gifts and visits on appropriate occasions such as Christmas, Easter, or birthdays. The child is expected to respect his elder kin and listen to their advice and discipline.

The rules of rights and obligations between two people are complex and allow for considerable amount of choice. A child living in his step-father's house is under the authority of this man. He has no choice. However, the extent to which his own father visits and sends his mother money for his support is a matter of choice. Furthermore, at any time the father may demand that the child must live with him. Again there are no simple rules which state whether or not the mother will release her child. It may depend upon many factors including her own financial status, that of the child's father, the number of other children she has, with whom the father is living, etc.

Ties to one's kin are strong among Puerto Ricans. In Puerto Rico a person traditionally retains his mother's family name, as well as his father's. A married woman may drop her maternal surname, but retains her father's when she takes on her husband's. This practice is only discarded on the mainland when dealing with non-Puerto Ricans.

Among other Puerto Ricans a man usually identifies himself in Spanish by reference to his maternal and paternal kin.

There is evidence that ties to natural kin are stronger than they are to adopted kin. One case in point involves a married woman whose name was changed to that of her adopted parents when she was a child. She is now asking the court for her own family name. She remains in contact with both families, but desires identity with her natural family.

In those families in which the parents are poorly balanced bilinguals (i.e., they speak Spanish far better than English) or are Spanish monolingual, the children often play an important role in the parents' contact with the non-Puerto Rican community. It is highly unlikely that there is any noticeable change in role relations within the family, but in dealing with shopkeepers, welfare workers, or hospital employees the dependency roles between parent and child are temporarily switched. This, of course, would also tend to be a class variable, higher-class individuals being more acculturated and more competent in English than lower-class individuals. They therefore need not depend upon their children to act as translators.

Close friends and relatives may be treated alike in the home, and friends may even be referred to in kinship terms such as uncle and aunt (Padilla, 1958, p. 120). The category of close friends is institutionalized, as a child's godparents (padrinos) are also his parents' co-parents (compadres). While a child receives one set of godparents when he is baptized and another when he gets married, it is the relationship between the co-parents and the parents that is the more important one. Often a child's godparent is also related to him, though this is not necessary. Obligations are as great between compadres (co-parents) as they are between kin, though close friends may also have such obligations without being compadres. Trustworthiness is the essential criterion for these relationships. If a friend or relative can be entrusted with the responsibilities of being a compadre, then one can relax in his presence without fear of losing his dignity.

Both husband and wife can become a person's co-parents although it is not necessary that this be the case. Whether a man is closer to his comadre or to his compadre depends entirely upon the relationship between the two people involved. There are no set rules to determine from which of these two a person will seek aid.

The obligations of kin, compadre, and close friends are both material and non-material. In times of need or distress when one is weakest they are the ones to whom a person can turn without fear of being turned away or of having one's weakness betrayed. Comfort is given, money may be offered, a job procured, or temporary lodging obtained. If need be, one's children will be taken in. Again, however, economics and contact with the dominant American culture necessitates some changes in the strength and form of these obligations. Recent migrants refer to "my aunt" or "my cousin" in Puerto Rico, while those individuals born or raised in New York are more likely to refer to "my father's aunt" or "mother's cousin", etc. (Padilla, p. 114). Kinship ties that extend back to Puerto Rico are stronger among the former than among the latter. Puerto Ricans themselves recognize the distinction between the two groups, recent migrants commenting on the lack of family unity amongst those who are living on the mainland. Thus role relationships may in part depend upon length of residence as well as kinship ties. If one believes that the economic prosperity of one's family is more important than are the rights and obligations of friendship, the trusting informality of the relationship with kin and friends breaks down.

Another important result of this change in status relations is the make-up of social groups. Recent migrants from Puerto Rico operate almost exclusively in closed networks consisting of family and friends from the same hometown or neighborhood. Puerto Ricans born in New York are more likely to interact with non-Puerto Rican neighbors and others who do not share the same values and life styles (Padilla, 1958, p. 215).

Other Frequent Role Relationships

Outside the circle of family, kin and friends, an adult also interacts with neighbors and other occasional acquaintances, fellow workers, supervisors, his boss and governmental officials. Informal (though not very intimate) relationships may be found to exist between a man and his Puerto Rican neighbors and a man and his fellow Puerto Rican workers. Many factory operations which employ Puerto Ricans will have a Spanish speaking straw boss through whom the boss communicates. For some Puerto Ricans there will be very little difference between the status positions represented by boss (and supervisor) and that of government officials. Both are in a position of authority and can theoretically withdraw their beneficence (paycheck, hospital care, police protection) at any time. The lower class, which in general is less familiar with means of manipulating their environment, are more inclined to see the two as alike. The type of employment open to the uneducated slum dweller makes him particularly vulnerable to the whims of his employer. Middle-class Puerto Ricans are more aware that the government exists to serve them and, therefore, see greater reciprocity in their relations with governmental officials, particularly if they are Puerto Rican.

Relationships with the clergy vary somewhat from one church to the other, but are more similar than dissimilar. The clergy are seen as a source of authority and they are addressed in formal terms. Relationships with clergymen are restricted to religious matters, though in some Protestant denominations somewhat more informal relationships are also possible. The Catholic clergy are rarely Puerto Ricans, while the Pentecostal clergyman may even be from the same hometown as many of his congregation. Nevertheless in all instances the relationship with the clergy is primarily a formal one. A striking example of this was related to us by an American priest who has traveled widely in Puerto Rico. If he is dressed in secular garb people are unaware that he is a priest. Upon discovering his true vocation their behavior always becomes more respectful, formal and distant.

Peer relationships between young people are also related to the degree of acculturation that has obtained among their parents. In the more traditional families girls are rarely allowed outside alone. If they are seen in the company of boys their own age, these boys are most often either related to the girls or are sons of a family which is socially intimate with the girls' family. In less traditional families peer groups tend to be mixed ethnically and there is little difference between relations with Puerto Rican and non-Puerto Rican friends unless some other relationship (such as kinship) exists. Color does not seem to affect relationships within the family, though it does frequently affect relationships outside the family in many subtle ways (cf. Values).

V. SOCIAL SITUATION

The social process closest to behavioral interaction that will be discussed in detail is the social situation which has been defined as the interaction of particular persons, in particular places and at particular times (Gumperz, 1964; Bock, 1964), appropriate for the discharge of particular (and recognized) role-related activities. Extrapolation and summation of data from social situations can be made in such a fashion as to derive the domains of a society.

Language choice in some situations is predictable by reference to the domain in which the interaction takes place. However, a description of those situations in which language choice is not so readily predictable would be of much greater interest and value for the purposes of this study. When do Puerto Ricans use English with each other? How does language function in the day to day interactions of Puerto Ricans in New York?* What follows is not meant to be an exhaustive list of situations in which language switching or unexpected language choice occurs; rather it is meant to provide a better understanding of the function of language in the everyday world of New York area Puerto Ricans, a world marked by both bilingualism and diglossia.

Father and child represent two well defined status positions with definite role relationships one to the other. Situations in which children and their fathers interact do change as time and local change. For example, one will rarely see a Puerto Rican father (or mother) punish a child in public. Aside from mild disciplinary measures, severe punishment is a private matter, and its public exposure would affect the dignity of all involved. Similarly, an argument between members of a family within one's own home will ordinarily be postponed if someone from outside the immediate, intimate circle arrives on the scene. As a result of propriety norms such as these, children are often taken home (change of locale) so that punishments can be meted out. Similarly topics will be changed to avoid arguments in the presence of inappropriate interlocutors. Language is also a behavior which functions to indicate situational changes.

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*cf. Piri Thomas, 1967, for an excellent view of the daily life of one segment of the Puerto Rican population in New York.

Our observations and interviews indicate that while a father will use Spanish to reprimand a child for poor behavior, he will often use English to discuss the child's educational goals and aspirations. Discipline and behavior problems are entirely within the Spanish language associated domains of behavior. The kind of success dependent upon education is associated with interacting in the non-Spanish speaking world. Many Puerto Ricans born, raised and educated in New York are functioning more and more within the value system of Americans. Therefore, a parent may go out of his way to learn the English vocabulary associated with higher education so that he can indicate to son or daughter that he is capable of functioning within this new domain, and that he has knowledge of its associated values. In this way the relative status positions between them need only be slightly altered, if at all.

In the preceding example English was used to indicate that father and child shared values pertaining to the educational domain or to mobility strivings. Thus in those families in which such sharing occurs intimacy can exist between its members in an English dominant domain. However, English is also used in other situations to indicate distance. A person may switch from Spanish to English to warn others of his anger. It has already been noted that women rarely use English at all, and when they do it is primarily when they must talk with non-Spanish speakers. Nevertheless, Puerto Rican mothers have been observed giving short commands to their children (both in the home and in the street) such as "Stop that," "Don't do that," "Come here", etc., even in the presence of non-Puerto Ricans. The rest of the mother's speech at these times is always in Spanish. Switching from Spanish to English may serve as a signal to the child that the mother is getting angry. Thus, if the child obeys, the mother need not actually reveal her anger in public.

Although children often use English with each other, the appropriate language to use in the home with adults is Spanish.* Therefore is is unusual to hear a child address his mother in English. It does occur, however, in the heat of an argument.

Ma diary June 20

A big argument between all of them ensued when they couldn't find the gloves and bats, Ana yelling at Willy, Willy yelling at Joey (pecking order!), all

(continued)

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*Observations confirm the fact that Spanish is the language of baby-talk. It is used spontaneously and without conscious effort when parents talk to very small children, even in homes where English is spoken by the parents to each other and to the older children. Smaller children seem to learn to speak English from older siblings and from the television.

trying to remember who had what last. Finally Willy got exasperated and yelled to Joey, "Now I'm telling you - tu fuiste el que los sacaste - now you'd better go find it!!"

Other examples of situational switchings from Spanish to English take place between adults. Instances of such switching have been reported to various project staff members by both middle- and working-class Puerto Ricans. In each case Spanish was reported to be the preferred language used by husband and wife within the home. English was only used during arguments or strong disagreements. Respondents were not able to explain why they switched, but remembered that it was always done without conscious effort.

One more situation in which English is used between Puerto Ricans was reported to the project staff by another investigator who studied the Puerto Rican community's involvement in public health and mental health activities. He found that group therapy, which has proved unsuccessful among lower-class Puerto Ricans, is only possible among well educated Puerto Ricans if it is conducted in English. Loss of dignity, humiliation and exposure of one's personal self are all foreign to Puerto Rican culture; therefore use of English makes it easier for these patients to interact in the therapy setting.

Since they are exposed to American culture in the streets and in school while interacting with otheryoungsters, English is commonly used among school-age Puerto Ricans. However, aside from its obvious use as a secret in-group language, Spanish has other functions for the youngsters with whom we have become familiar.

A party in the home of one college-age respondent was attended by boys and girls in high school and college. Everyone present was Puerto Rican except the author. The switching which was observed seemed to be natural and spontaneous. The apartment was large enough and there were enough people present so that the observer was able to make himself quite inobtrusive.

In this situation, with no adults present, English was the language heard most often, even while Spanish music was preferred for dancing. Spanish was used mainly for "kidding" and joking. It seemed that Spanish was used to unite the youngsters in a common, intimate, emotional bond even while many of them spoke better English than Spanish. The boys themselves report that Spanish functions in this way when they are "rapping". (Rapping is a form of verbal interplay used to impress someone of the opposite sex.) Rapping commonly takes place while on a date or while courting. It can be conducted in either language. However, those youths who are skilled at rapping in Spanish are most highly regarded by their peers, both male and female.

Dating provides us with another interesting situation in which language plays an important part. Although the adolescents often switch languages amongst themselves, it is imperative that the boy speak Spanish with the girl's parents. If a boy comes to a girl's home he must impress upon her parents the fact that he is trustworthy and that his values correspond with theirs. He does this, in part, by speaking Spanish with them. This presents a considerable problem for those who speak Spanish poorly. These youngsters reportedly strain their limited vocabulary in social pleasantries and refrain from prolonged discourse for fear of revealing their inadequate command of the language.

It is important to mention here that the preceding description of language usage among young, mainland raised Puerto Ricans does not only pertain to those who are functioning well in school and who are thus attaining the potential for upward social mobility (and, as is feared by many parents, outward cultural mobility). In the first place, all of those in high school and college whom we have observed were from working-class families which were quite similar to the lower-class families with which we had also become familiar. Second, much of this same behavior (e.g., preference for English among the children) has been noted among those young Puerto Ricans who are doing poorly in school, as well as among those who are doing well.

There are also differences in language usage between the educated and uneducated adults. Our observations indicate that there is greater usage of Spanish among some young lower-class Puerto Ricans than among somewhat older Puerto Ricans of the same economic class. This is not entirely explained by length of residence on the mainland or by the language in which they were educated. Rather, it seems that some youngsters actually participate in mainland culture more than do their elders. Soon after their adolescence, especially when they marry, some lower-class youngsters become increasingly involved in a Puerto Rican life style, and less involved in American culture. This is probably not so true for those who go on to higher education, who maintain their contact with the mainland culture, especially in the domains for which this is appropriate, such as business or education.

Finally, it might be appropriate to examine some situations of intergroup interactions. We find that such interactions are not all transactional and that (as in intra-group interactions) English is not reserved exclusively for transactional, nor is Spanish reserved exclusively for personal interactions.

First, a situation in which English is used for transacting business when it might appear that Spanish would be appropriate: The check cashing services in Puerto Rican neighborhoods hire Spanish speaking clerks to accommodate their customers. In addition, signs and placards in these little offices are in both English and Spanish. Yet, observations reveal that much of the interaction between clerks and customers is in English, although the clerks to each other and the customers to each other most frequently converse in Spanish. This is in direct contrast to what happens when a Puerto Rican must converse with a city official such as a hospital or welfare worker. In this situation it is more likely that a child or a friend will be used as an interpreter, unless the official speaks Spanish himself.

The main difference between these two situations lies in the nature and frequency of the transactions. The relative statuses between the principal participants remain intact in both. However, in the former situation English may be used because a simple, ritualistic verbal repertoire is all that is required to transact the business of cashing a check each week. This transaction is easily learned and allows little room for error. The latter situation is not one which is frequently repeated for most persons. Furthermore, it is important that the contents of the communication be transmitted as accurately as possible. Therefore, the language which best performs this function is the one which is used. If English speaking children are present, English and Spanish are both used.* If the official or clerk speaks Spanish, Spanish is used.

The world of work provides many varying situations. There is a correspondingly wide variation in language usage in these situations. For instance, many non-Spanish employers do not allow their employees to speak Spanish while on the job. On the other hand, other employers actually hire a Spanish speaking straw-boss to facilitate communication. However, even in such cases individual differences occur. We came to know a Puerto Rican who was foreman of a maintenance crew for a large housing project. Most of the maintenance men were also Puerto Rican, yet this man insisted upon using English. He claimed that he did this in order to maintain his authority, which is another way of saying that he was thus able to maintain relative status positions while on the job. He did use Spanish with those men who were recently arrived from Puerto Rico and who did not speak much English. However, these men received their work instructions away from the others.

During lunch this same foreman conversed with his men in Spanish unless "Americans" were present. In this case he spoke English only. This pattern is very common and illustrates how both languages can function to indicate group membership (and even intimacy) once the participants have decided upon the group's composition and function at any given moment. Thus Spanish may be used in the presence of Americans in order to exclude them from the group. On the other hand, if a group has so defined itself as giving equal status to Anglos and

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*Note that in this situation the relative parent-child roles are partially reversed as the parent becomes dependent upon the child for accurate translations.

Puerto Ricans, English will usually be used between two Puerto Ricans, even when the English speakers are not directly engaged in the conversation.

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The situations described above have, hopefully, further indicated that linguistic behavior cannot be causally predicted nor easily understood. Language choice is predictable only when viewed within a rather encompassing context. The combination of lower order and higher order predictors increases the possibility of understanding individual language choice and larger societal speech patterns by combining and contrasting the information and the concepts that each level of analysis provides and requires.

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Chapter
II-2

Puerto Ricans in Our Press[1]

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and
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Introduction

This study reports on the treatment of Puerto Ricans in four New York City dailies, two published in English and two in Spanish, during the six-month period March-August 1967 (inclusive). It seeks to answer such questions as: how frequently were Puerto Ricans referred to?; what was the major focus of the references to Puerto Ricans?; how often is the Spanish language referred to in connection with Puerto Ricans?; are needs or problems of the Puerto Rican community discussed and if so, are these viewed as remediable?; are particular characteristics ascribed to Puerto Ricans individually or as a group and, if so, are these positive or negative?; are Puerto Ricans viewed as Americans also or is their dual status ignored? In all of these connections two matters are of primary interest:

(1) Are there any differences between the English language and the Spanish language dailies in these connections?

(2) Is the treatment accorded the Spanish language and Puerto Rican culture related to the treatment accorded other topics pertaining to Puerto Ricans or are these matters entirely unrelated?[2]

Frequency of Mention

During the six-month period covered by this study 722 items mentioning individuals or groups referred to as Puerto Rican(s)[3] were encountered in the four dailies selected for study. Of these, 658 were encountered in the two Spanish dailies and 64 in the two English dailies.[4] The Spanish dailies revealed a rather constant number of references to Puerto Ricans during each of the six months studied. The English dailies showed a more irregular pattern, jumping from 5% of all of their mentions of Puerto Ricans in June (the month before several incidents of looting and rioting in Spanish Harlem) to 53% of all mentions in July (the month of the incidents), and falling back to 16% in August. Thus, Puerto Ricans seemed to be of little interest to the English press either before or after the brief flare-up of violence in July.

Major Foci of Interest

An analysis of all 722 items dealing with Puerto Ricans revealed that the major focus of interest, for both English and Spanish dailies, was in the area of intergroup relations between Puerto Ricans and the dominant Anglo society. As Table 1 reveals, 76% of all English references to Puerto Ricans were coded as belonging to this category.[5] On the other hand, 41% of the Spanish references to Puerto Ricans were coded as belonging to this category. The only other category in which there were proportionately more English than Spanish items was that dealing with Puerto Rican--Negro relations (English: 5%; Spanish: 1.2%).

By way of contrast it should be pointed out that Puerto Rican organizational events, the attainments of individual Puerto Ricans, and Puerto Rican cultural affairs receive very little attention in the English dailies and far less there than in the Spanish dailies.

TABLE 1: FOCI OF INTEREST

Focus	Items in Spanish Dailies	Items in English Dailies
1. Individual affairs	17.8%	7.7%
2. Organizational events	23.2	1.6
3. Cultural topics	14.3	9.3
4. PR-Anglo relations	41.3	76.5
5. PR-Negro relations	1.2	5.0
6. PRs and others*	2.3	---
N	658	64

*Puerto Ricans and other Hispanic groups, Puerto Ricans and international affairs, etc.

Thus, for the English dailies Puerto Ricans are of interest primarily as they impinge upon the surrounding Anglo society. The internal life of the Puerto Rican community--its leaders, its functions, its holidays, its creativity--are not brought to the attention of the readers of the English press. As in the case of the extended coverage accorded Puerto Ricans during the July 1967 disturbances, Puerto Ricans are discussed and reported in the English press primarily in the context of the problems or difficulties that they pose for Anglo society, whereas their cultural activity and creativity is by and large overlooked.

The Spanish and English Languages

Only a quarter of the Spanish items and some 42% of the English items referring to Puerto Ricans contain any reference to the Spanish language. In the English press such references are largely (four to one) of an identificatory nature ("Spanish speaking individuals...", "...he said in Spanish."). In the Spanish press identificatory references also predominate (1.5 to 1) but the relative proportion of positive references (encouraging retention, interest and utilization of Spanish) is greater.

In conjunction with English the two emphases are reversed. Once again there is little overall concern with the topic but this time it is the English press that has relatively more positive references.

In general, neither the English nor the Spanish press seemed to be much concerned with language as a group symbol or cultural value during the months under study. The U.S. Congress was engaged in debating the Bilingual Education Act and both Senators from New York State and several Congressmen from New York City sought to impress the Puerto Rican community with their favorable actions on behalf of this act.[6] Nevertheless, it cannot be said that any great interest was manifested among rank-and-file Puerto Ricans in the New York City area, although several Puerto Rican cultural and organizational leaders testified on behalf of this Act and arranged to have their views publicized in the Spanish press.

Puerto Ricans in New York are not yet language conscious or organized on behalf of language use, language recognition, or language maintenance. Their use of Spanish is largely traditional, in connection with the daily rounds of family and neighborhood life, rather than in terms of an ideology or an organized point of view. Although the Spanish press tends to reveal a different view of Spanish (and of English) than does the English press the difference is more one of relative emphasis than of clearcut distinction or major saliency.[7]

Puerto Rican Needs and Problems

The English dailies are much more likely to view Puerto Ricans in terms of their needs or problems than are the Spanish dailies. As Table 2 reveals, over 85% of the references to Puerto Ricans in the English dailies were problem-connected. In the Spanish dailies this association obtains for only 60% of all references to Puerto Ricans. Spanish dailies see Puerto Ricans as more than merely carriers of problems. For them Puerto Ricans also have leaders, organizations, customs, celebrations, creative figures, etc. For the English dailies the association of Puerto Ricans and problems is practically complete.

TABLE 2: NEEDS OR PROBLEMS OF PUERTO RICANS

		Spanish Dailies	English Dailies
Problems/needs mentioned		60%	86%
	N	658	64
Solutions or remedial steps recommended		79%	56%
	N	396	55

TABLE 3: NEEDS OR PROBLEMS OF ANGLO-AMERICANS (in connection with Puerto Rican interactions)

		Spanish Dailies	English Dailies
Problems/needs mentioned		14%	34%
	N	658	64
Solutions or remedial steps recommended		45%	27%
	N	92	22

However, even if we examine only references to Puerto Rican problems a major difference obtains between the English and the Spanish dailies. The Spanish dailies indicate the programs or steps that are needed in order to overcome the problems of Puerto Ricans in 79% of the cases in which such problems are noted. The English dailies, on the other hand, recommend solutions or remedial steps only in 56% of the cases in which they discuss the problems of Puerto Ricans. Thus, in the English dailies the Puerto Rican is not only more frequently problem ridden but the action implications or remediation recommendations with respect to these problems are less frequently forthcoming. The English dailies do not show the concern for remedying the problems or needs of Puerto Ricans that is shown by the Spanish dailies.

However, the above difference may, in part, be due to a difference in journalistic tradition. The Spanish dailies may more generally be amenable to the making of recommendations or evaluations--and to doing so in the news columns per se rather than only on the editorial page--than are the English dailies. Thus, in connection with the needs or problems of Anglo-Americans (vis-a-vis their interactions with Puerto Ricans), the Spanish dailies are again more inclined to recommend solutions and remedial steps than are the English dailies (Table 3), even though the English dailies feel free to mention relatively more needs and problems of Anglo-Americans vis-a-vis Puerto Ricans than do the Spanish ones.

Characteristics and Traits of Puerto Ricans

Slightly over a third of the items from both groups of dailies make no mention of the traits or characteristics of Puerto Ricans, whether as individuals or as a group (Table 4). However, when such mention is made the English dailies are far more likely to attempt either a "balanced" (negative plus positive) presentation or an entirely negative presentation than are the Spanish dailies. The Spanish dailies are far more likely to make entirely positive comments about Puerto Ricans than are the English dailies.

Characteristics and Traits of Anglo-Americans

Anglo-Americans who interact with Puerto Ricans are far less frequently characterized by both sets of dailies than are Puerto Ricans (Table 5). Once again, however, we note that the English dailies are much more inclined toward balanced characterizations whereas the Spanish dailies are more inclined toward positive characterizations. In this respect Tables 4 and 5 are directionally quite similar. However, the two tables also differ significantly in that Anglo-Americans are less frequently viewed positively and more frequently viewed negatively or in a balanced fashion than are Puerto Ricans. It is in this roundabout way that it becomes evident that both sets of dailies tend to be relatively critical on Anglo-Americans in so far as their interaction with Puerto Ricans is concerned. The increment in negative characterizations is particularly noticeable for the Spanish dailies.

Negro-Puerto Rican Relations

As Table 6 reveals the English dailies are much more inclined to discuss Negro needs and problems (as part of their treatments of Puerto Ricans) than are the Spanish dailies. "Negroes and Puerto

TABLE 4: CHARACTERISTICS OF PUERTO RICANS
(As individuals or as a group)

		Spanish Dailies	English Dailies
Characteristics mentioned		62%	64%
	N	658	64
Balance between positive and negative traits		14%	46%
	N	410	41
Positive traits only		82%	37%
	N	410	41
Negative traits only		4%	18%
	N	410	41

TABLE 5: CHARACTERISTICS OF ANGLO-AMERICANS (in connection with Puerto Rican interactions)

		Spanish Dailies	English Dailies
Characteristics mentioned		5%	31%
	N	658	64
Balance between negative and positive traits		25%	55%
	N	36	20
Positive traits only		55%	25%
	N	36	20
Negative traits only		20%	20%
	N	36	20

TABLE 6: NEEDS OR PROBLEMS OF NEGROES
(in connection with Puerto Rican interactions)

		Spanish Dailies	English Dailies
Problems/needs mentioned		5%	36%
	N	658	64
Solutions or remedial steps recommended		46%	39%
	N	33	23

TABLE 7: CHARACTERISTICS OF NEGROES
(in connection with Puerto Rican interactions)

		Spanish Dailies	English Dailies
Characteristics mentioned		2%	28%
	N	658	64
Balance: negative and positive		42%	61%
	N	12	18
Positive only		25%	11%
	N	12	18
Negative only		33%	28%
	N	12	18

Ricans" is often a stock phrase in the English dailies whereas it is anything but that in the Spanish dailies. However, the Spanish dailies are, once again, more inclined to offer recommendations or solutions to the Negro problems that they do discuss. Finally it should be noted that the English dailies are more inclined to make recommendations with respect to Negro problems and needs than they were with respect to Anglo-American problems and needs. This is not the case for the Spanish dailies.

As for the characterization of Negroes (Table 7), they are less frequently viewed positively and more frequently viewed negatively or in a "balanced" fashion than are either Anglo-Americans or Puerto Ricans by both sets of dailies.[8] The increase in the proportion of negative characterizations of Negroes is particularly noticeable for the Spanish dailies.

Comparison between Negroes and Anglo-Americans vis-a-vis interactions with Puerto Ricans

Since the items under study were selected because of their reference to Puerto Ricans it should come as no surprise that Puerto Rican needs and traits are mentioned more frequently than are those of either Anglo-Americans or Negroes. However, it is exactly the comparison between Anglo-Americans and Negroes that is of interest to us at this point. It is quite clear that the English dailies more frequently recognize that both of these groups have problems or needs in connection with their interaction with Puerto Ricans. It is equally clear that the Spanish dailies suggest solutions to these needs or problems relatively more often.

As far as traits are concerned it is clear that the English dailies more frequently describe Negroes and Anglo-Americans with "balanced" terms whereas Spanish dailies more frequently describe them with positive terms. Negroes receive the largest proportion of negative descriptions in both sets of dailies, the proportion of such negative descriptions for Negroes being somewhat higher in the Spanish dailies than in the English. All in all, the Spanish dailies reveal a lower relative frequency of mention of Negro problems, a higher relative frequency of suggested solutions to Negro problems, and a higher relative frequency of negative characterizations of Negroes. These may all be considered indicative of growing Puerto Rican-Negro polarization in the New York City area.

Puerto Ricans as Americans

The American citizenship that all Puerto Ricans possess receives different treatment in the two types of dailies under consideration. It is mentioned in 31% of the items from the Spanish dailies but only in 20% of the items in the English dailies. Of those items that mention it in the Spanish dailies 37% do so with advocacy and positive references (e.g., pointing to Puerto Rican contributions to American life, demanding additional assistance for them as American citizens, etc.) and 63% do so merely in an identificatory fashion (Puerto Rican residents of New York are entitled to participate in tomorrow's elections, Puerto Ricans constitute x% of American servicemen in Viet Nam). The corresponding percentages in the English dailies are 23% and 77%. The American citizenship of Puerto Ricans is more frequently viewed in a positive and noteworthy light in the Spanish dailies than it is in the English dailies.

Puerto Rican Gains in the United States

While the American citizenship of Puerto Ricans is more frequently applauded (or exploited) in the Spanish dailies than in the English ones, the topic of progress, gains, and accomplishments of Puerto Ricans in the United States is more frequently mentioned in the latter than in the former. In the Spanish dailies only 17% of all items were concerned with this topic whereas in the English dailies 36% dealt with this matter. This difference in relative concern with whether Puerto Ricans are or are not making progress in their "war against poverty" is related to the greater readiness of English dailies to view Puerto Ricans in a context of needs and problems.

While the Spanish dailies are less inclined to raise the question of progress or gains among Puerto Ricans in the United States they are somewhat more inclined to mention this topic with satisfaction when it *is* raised. Thus 28% of the mentions of this topic in the Spanish dailies express satisfaction whereas only 22% of the mentions in the English dailies do so. It should be underscored that not only is this difference a small one but that the lion's share of all references to Puerto Rican gains, whether in the Spanish or in the English dailies, are negative rather than positive ones.

The Context of References to Spanish

In the Spanish dailies 47% of the references to the Spanish language are in connection with Puerto Rican--Anglo-American intergroup relations (Table 8). In the English dailies the corresponding figure is 80%. English dailies are much more likely to view the Spanish language as a barrier to intergroup communication or Puerto

TABLE 8: THE CONTEXT OF REFERENCES TO SPANISH

Context		Spanish Dailies	English Dailies
Intergroup (PR-Anglo-American)		47%	80%
	N	658	64
Other (cultural, organizational, individual, etc.)		53%	20%
	N	658	64
Puerto Rican needs and problems		27%	45%
	N	396	55
Positive mention in connection with PR needs/problems		44%	24%
	N	108	25
Positive mention re Puerto Ricans as Americans		22%	00%
	N	55	8
Positive mention re Advocacy of PRs as Americans		50%	00%
	N	24	2
Puerto Rican gains/progress viewed negatively		26%	53%
	N	80	18

Rican gains and progress in the United States. Spanish dailies by no means overlook the problematic nature of the Spanish language in both of these contexts. However, for the Spanish dailies the Spanish language is also related to Puerto Rican cultural events, to organizational activities and to individual descriptions, none of which obtain more than very rare mentions in the English dailies.

This difference in the contextualization of references to the Spanish language is equally noticeable if we examine only those items that deal with Puerto Rican needs and problems. In the Spanish dailies 27% of these items contain a reference to the Spanish language whereas in the English dailies 45% do so. Furthermore, of the references to the Spanish language in the context of Puerto Rican needs and problems carried in the Spanish dailies 44% are positive and 56% identificatory. In the English dailies only 24% of the references to the Spanish language in the context of Puerto Rican needs and problems are positive and 76% are identificatory. Thus it becomes quite clear that in the English press references to the Spanish language lack the positive and compensatory connotations that they have in the Spanish press.

The Spanish dailies refer to the Spanish language positively in 22% of their references to Puerto Ricans as Americans and in 50% of their advocatory references to Puerto Ricans as Americans. The English dailies have no positive references to the Spanish language in either of these connections. On the other hand, the Spanish dailies mention the Spanish language in only 26% of their negative comments concerning Puerto Rican gains or progress in the U.S.A.

The English dailies do so in 53% of such comments. Obviously the Spanish language among Puerto Ricans is viewed as also being something positive and valuable in the Spanish dailies whereas it is viewed as being something primarily negative and harmful in the English ones.[9]

Summary

Content analyses of references to Puerto Ricans in two English and two Spanish dailies in New York City during a six month period revealed that the English dailies showed little interest in Puerto Ricans either before or after the month of July during which there was a flare-up of violence in Spanish Harlem.

Relative to the Spanish dailies the English dailies: were more concerned with Puerto Rican--Anglo-American intergroup relations, referred more frequently to the Spanish language but did so more frequently for identificatory purposes rather than in a positive vein, more frequently referred to Puerto Ricans in connection with their needs or problems, less frequently offered solutions or remedial steps in conjunction with these problems, less frequently attributed positive traits to Puerto Ricans and more frequently attributed negative traits to them, more frequently mentioned Negro needs and problems together with their references to Puerto Ricans, less frequently characterized Negroes in either negative or positive terms, less frequently referred to Puerto Ricans as Americans, less frequently made positive or advocatory comments about Puerto Ricans as Americans even when they were referred to as such, more frequently raised the topic of Puerto Rican gains or progress in the United States but did so with fewer positive references, more frequently referred to the Spanish language in connection with Puerto Rican--Anglo-American intergroup relations, Puerto Rican needs and problems and the absence of Puerto Rican gains and improvements in the United States, and _less frequently_ referred to the Spanish language positively in conjunction with Puerto Ricans as Americans.

Whereas the saliency of the Spanish language was rather low in the Spanish press this topic as such was normally referred to in the context of positive evaluations and intra-group cultural values and activities. There were some indications of Puerto Rican-Negro tension, primarily in terms of competition for anti-poverty funds as well as in terms of Puerto Rican reluctance to being classified together with Negroes in most Anglo-American references.

Footnotes

1. The research reported in this paper was financed by the Language Research Section, Department of Health, Education and Welfare (Contract No. OEC-1-7-062817-0297). Data processing in connection with this research was supported by a grant from the College Entrance Examination Board.
2. The major focus of the entire project of which this report is a part was upon Puerto Rican bilingualism in the Greater New York City area. The initial questions which prompted the newspaper study in connection with this project were: what is the saliency of the Spanish language in comparison with other references to Puerto Ricans in the local Spanish and English press?; is Spanish viewed as important or unimportant, positive or negative in comparison to other Puerto Rican concerns and characteristics? Thus this study was viewed as one of several seeking to establish the general climate of opinion surrounding Puerto Rican bilingualism. The degree and nature of that bilingualism was simultaneously studied by a team of psychologists, sociologists, and linguists.
3. The following permissable synonyms for "Puerto Rican(s)" were recognized in perusing the Spanish dailies: boricua, borinquen. In view of the purposes of this study items dealing with individual acts of crime or violence were omitted unless they pertained to community leaders or to community-wide concerns or problems. The elimination of items dealing with individual acts of crime or violence restricted the number of Spanish press items included in this study much more than it restricted the number of English

press items. News items, features, editorials and, in general, all items other than paid advertisements were included in the scope of this study.

4. Both Spanish dailies (El Diario and El Tiempo) publish 6 issues per week. One English daily (The New York Times) publishes 7 issues per week and the other (The Post), 6. Item size (in square inches) did not prove to be a factor that differentiated between the Spanish and English dailies.
5. Each investigator coded separately. The senior investigator spot-checked 20% of the classifications of the junior author throughout the coding period and discussed with him all disagreements encountered. The agreement rate was constantly above 90%.
6. The Bilingual Education Act was finally adopted by Congress in December 1968. For texts of the hearings in connection with this act see Yarborough, Ralph (Chmn.), Hearings before the Special Subcommittee on Bilingual Education of the Committee on Labor and Public Welfare, United States Senate, 90th Congress, First Session, on S. 428. Washington, U.S. Government Printing Office, 1967.
7. This statement applies equally well to treatment of Puerto Rican culture. Here again we find a slight tendency for the Spanish press to treat this topic more frequently and more favorably than does the English press rather than any dramatic difference between them. This may be taken as further evidence that the Spanish press does not serve a readership that actively seeks to maintain or to develop Hispanic culture in New York in any ideolcgically mobilized fashion.

8. With some n's as small as 12 or 18 (and even smaller n's in some subsequent tables) the requirements of statistical significance (in an inferential sense) may not be met. However, the requirements of inferential statistics do not present a valid claim upon our analysis since the entire "population" of items relating to Puerto Ricans has been examined in the four dailies selected for study, rather than merely a sample of such items, as is the practice in inferential studies. Whether or not the six month period, March-August 1967, is characteristic of other periods, before or since, is a matter that requires separate study. As of this writing (July 1968), it is our impression that the dailies studied have not changed their views or emphases with respect to Puerto Ricans.
9. In terms of the basic purposes of the project of which this study is a part it seems clear that we are dealing with a Spanish press that currently seeks to sustain a low keyed but generally positive view of the Spanish language among its readers. Spanish language maintenance--i.e., the continued use of Spanish--and language loyalty--i.e., feelings of pride and devotion toward the language--are not frequently mentioned, and Spanish language purity (e.g., the avoidance of Anglicisms) is mentioned hardly at all. However, relative to the English press the Spanish press fosters and reinforces a view of the Spanish language as being the normal and entirely desirable vehicle of communication of Hispanic New Yorkers. In addition, it relates Puerto Ricans to other Hispanic residents of the Greater New York Area and implies the need for Spanish as an inter-Hispanic bond, in addition to its functions within the

Puerto Rican community alone. If Puerto Ricans in New York react to the Spanish language in the same terms and in the same key as does the Spanish press that they read we would expect general positiveness with little conscious stridency or overt advocacy.

Chapter
II-3-a

INTELLECTUALS FROM THE ISLAND

Joshua A. Fishman

The average New Yorker is not aware of it--be he White, Negro or Puerto Rican--but the City is now "home" for a large and variegated Puerto Rican intelligentsia. I have interviewed a sample of twenty of the poets, artists, singers, journalists, scholars and organizational leaders that constitute this intellectual elite. I have talked for many hours with each, particularly about how each one views the confrontation between being Puerto Rican and being American, between speaking Spanish and speaking English, between ties to the mass of ordinary Puerto Ricans and ties to a highly intellectual group of colleagues. At times we spoke in English, at times in Spanish. Usually I merely listened or probed with brief questions. Sometimes I argued and "pushed" and became caught up in an experience that was at once intensely emotional and intellectual.

With Whom did I Talk?

Puerto Rican intellectuals in New York - like all intellectuals everywhere - vary tremendously in the quality of their work and in the degree of their reknown. My sample of twenty was designed so as to reflect this variation. It included some of the younger American born leaders that are now beginning to come to the fore as well as some of the equally young individuals who completed formal higher education at the University of Puerto Rico in San Juan under the strong influence of contemporary Latin American political and intellectual developments. It included a few whose names are not only known throughout Spanish Harlem, the Lower Bronx, and Bedford-Stuyvesant, but who have "caught on big" in the general American world. It included some poets, artists, singers, and scholars who scrimp and save to publish or publicize their own works--which, in the end, reach only a small circle of admirers--and it included some whose names are well known in American galleries, concert halls, universities and best-seller lists. Some were obviously well off--others were equally obviously struggling to get by.

Only three of my interlocutors had been born here or had arrived in New York City in early childhood. The others hailed from all parts of the Island: large cities, smaller towns and even rural areas. On the average they had already spent some 15 years or more on the mainland by the time of our interview. As a result, nearly half had also obtained some part of their formal education here, for they were now mostly in their early 30's and 40's and had arrived here at a high school or college attending age. Most of them spoke English fluently although often very accentedly. Even those who were from the Island had studied English for many years in Puerto Rico's schools, the older ones among them having attended these schools during the time when English was not merely a required subject (as it is today) but the very language of all school instruction. Their current incomes--only 4 depending on the Puerto Rican community per se for their livelihoods--were such as to provide half of them with a more statusful life here in New York than their fathers had enjoyed in Puerto Rico. This positive social mobility--limited though it was--may, in part, have been related to the light skin color that characterized most of them. As intellectuals they were more aware than most of their compatriots that they had come from one society that viewed skin color as being of secondary importance to another that was still far more biased in this respect.

Spanish-English Bilingualism

Minority group intellectuals on the American scene have traditionally polarized into two sub-groups: on the one hand, those that ideologize (and politicize) the minority culture and its linguistic, literary and festive symbols, and, on the other hand, those that enter the mainstream of general American intellectual life with all of the additional haste and finality that intellectualization and rationalization provide. My concern was to gauge where Puerto Rican intellectuals stood in the light of this historical perspective and, as a result, I devoted many probes to their attitudes and behaviors in the language area. Invariably this proved to be a topic that my interlocutors wanted to discuss for it was one about which they felt deeply. All of them reported that they spoke Spanish predominately to their family, close friends and Puerto Rican colleagues. However, the vast majority (19 out of 20) also reported that they spoke English as well--on particular occasions or for particular purposes--with these very same people. Thus, rather than either a generalized flight from Spanish or the elevation of Spanish into an exclusivistic symbol of aggrieved and beleaguered Puerto Ricanness we find, instead, a rather widespread and stable bilingualism in which each language is fully accepted.

Spanish is claimed as the usual vehicle when Puerto Rican intellectuals are "among their own". English words or phrases admittedly creep into informal conversations--whether they be relaxed or heated--but they serve to signal informality itself, or humor, or contrast, or emphasis in the context of what is considered to be a basically Spanish and basically informal conversation. In more serious and more public discussions or lectures (e.g., on Spanish cultural or Puerto Rican communal topics) a more standard Spanish is claimed by most. This variety of Spanish--often identified as their "best"--does not brook English interference. All but my three American born interlocutors claim to command standard Puerto Rican Spanish; the American born admit that they have far greater fluency in informal than in standard Spanish.

Tape F49

VF. If we are by ourselves we speak strictly Spanish. Unless, some times we joke about making up words in Spanish and English and... we have a lot of fun making up words, translating expressions that sound so funny in Spanish. In that way we speak, you know, a little English, Spanglish.

F. What would you think if he were to speak English to you?

VF. It would feel funny. Not normal.

F. How would you interpret it?

VF. Well, since we speak English when somebody (American) is around, I would think he is, I don't know, nervous or something. There could beexceptions; sometimes the conversation shifts. It might shift for a couple of seconds...For example if they are trying to describe a situation that happened at school, or something like that, the whole story is switched into English.

English too has its recognized intra-group functions. It supplies technical terminology for informal conversations and it is the basic vehicle for many advanced discussions on topics that are not essentially Puerto Rican or Hispanic. In addition, the American born intellectuals prefer English for difficult or technical or formal discussions with their Puerto Rican colleagues on any topic whatsoever, although they are willing to "sweat it out" in Spanish if they have to.

Is it true then that English has no intra-group function as the basic vehicle of ordinary conversation? Is it true that its function is either metaphorical (whether contrastive, emphatic or humorous) or technical, but never informal, man-to-man? Only four of my interlocutors indicated that they never informally conversed in English with bilingual Puerto Ricans. The others--including all three of the American born--indicated that they did use English as an intra-group vernacular. When? Invariably with American born or bred youngsters of Puerto Rican origin, most of whom prefer English even if they know Spanish quite well, and some of whom are said to know very little Spanish--if at all. When speaking to the latter and using English as the basic vehicle of informal intra-group communication Spanish words and phrases assume the metaphoric function that English words and phrases discharge when informal Spanish is the basic vehicle.

Most of the Puerto Ricans with whom my interlocutors interact are themselves bilingual. Why, then, I asked naively, do they speak Spanish to them at all? Why not just speak English? Wouldn't that simplify matters? Only 5 replied in clearly ideological terms that claimed Spanish as an unexpendable badge of ethnic identification. The rest replied primarily in terms of personal authenticity, habit, and accommodation to the presumed preference of others. Just as there was, by and large, no ideological rejection of English for intra-group communication so there was little adamant defense of Spanish. However, lest this be misunderstood, let me hasten to add that only two of my interlocutors could conceive of being Puerto Rican or of developing Puerto Rican culture here in New York in any language other than Spanish. Nevertheless, as a group, their use of Spanish is more natural than ideological, more habitual than philosophical.

Tape F80

SV. Only if the situation demands it. Then we speak a few words in English.

F. What would demand it?

SV. For example, there is a letter coming out from any wholesaler. We discuss the letter in Spanish, of course, and sometimes we have to discuss it in English in order to see the right interpretation...We go in both languages on these occasions, not only in one language.

F. Why do you use Spanish at all on such occasions?

SV. I fought all my life to defend the existence of my language. And I would never renounce it. And, therefore, wherever I am I speak Spanish with my own kind. If I have to, then, I talk English to clarify the whole thing. Otherwise I speak my own tongue. That's the only privilege that a human being has, to speak his own tongue. We don't try to avoid using the English language...We are dealing with both languages at the same time. Back and forth.

Puerto Rico itself is so close at hand and contacts with it are so constant that no grand ideology in defense of Spanish is felt to be necessary among Puerto Rican intellectuals in New York. There is no high-strung sensitivity about using English with the younger generation. There is no campaign against repeatedly switching from Spanish to English and back again in one and the same informal Spanish conversation. There is a desire to keep formal, literary, cultured Spanish as pure and as correct as it is in Colombia or in other intellectual centers of the Hispanic world; however, everyday communicative competence and communicative needs understandably impose their own requirements.

Having expected an emotional defense of "Spanish only and always" and having received it so infrequently I was eager to probe for signs of the functional displacement of Spanish. What would your own family, friends, and colleagues think if you informally spoke English to them rather than Spanish? Five--including all of the American born intellectuals--replied that such a reversal on their part would either not be noticed or would cause no reaction if it were.

Tape F139

F. If you were to speak English to her, here at home or in some place where your friends are together with you, what would she think?

HA. ...Then there's a little surprise. You see they know me already and they know her and it sounds kind of funny in a way, and probably some of them comment and say "how come you go and speak in English to her when we, all of us here, speak in Spanish?"

(continued)

F. What would she think if you spoke English to her nevertheless? She knows English.

HA. Oh, she gonna feel very disappointed; she gonna feel confused. _She_ wouldn't do it to _me_.

The others reported, however, that such a reversal was unthinkable, it would be interpreted as a lack of sensitivity or accommodatingness on their part. Thus, much more than they are engaged in a struggle to "save Spanish" among Puerto Ricans in New York my interlocutors are involved in a bilingual speech community that would consider it odd if one were to confuse Spanish-speaking with English-speaking occasions. It would be as if a person did not know when to wear a business suit and when to wear a bathing suit simply because he had both.

Better Spanish vs. Folksy Spanish

Only two of my interlocutors rejected the notion that they ever spoke anything but "the very best" Spanish. This is a sensitive topic for Puerto Rican intellectuals for they have been attacked from "both sides," so to speak, in this very connection. Spaniards and other Latin Americans, commenting on Puerto Rico as the only Spanish-speaking territory in the Western hemisphere still under "foreign rule," have accused Puerto Ricans of insufficient manliness, insufficient pride, and, among other things, of insufficient care for the purity of their conversational Spanish. On the other hand, New York educators and administrators, realizing that the Puerto Rican man-in-the-street usually spoke a variety of Spanish not identical with that taught in the foreign language departments of American high schools and universities, dubbed it "Puerto Rican" in official forms, since it could not, in their eyes, be considered Spanish!

Caught in the middle between these two biased views Puerto Rican intellectuals in New York are understandably eager to claim that their "best Spanish" (buen español, español culto) is second to none. They associate it primarily with educated and cultured topics that are discussed with educated and cultured people. In addition, however, two of my interlocutors reported that they went out of their way to speak their very best Spanish with Spaniards, Latin Americans or others whom they suspect of entertaining the view that Puerto Ricans speak Spanish poorly. As for what makes "better Spanish" better--my interlocutors were quite unanimous that it was primarily the avoidance of anglicisms and the presence of final sounds (such as the s sound in hombres,

Tape F49

VF. ...it's funny that some people have told me, "you don't sound Puerto Rican," because usually, except with my very close friends, my Spanish is sort of careful...

F. You actually pronounce the s's?

VF. Yes. Not all of them, because it sounds...it sounds fake if you put too many s's.

F. Now, to whom would you speak "carefully"?

VF. To Dr. Ra or Dr. Ro , they are writers, and to my friends from Ecuador that go to the Ateneo, and, well, to my Spaniard friends.

F. In the group like the one at Caravan House?

VF. Oh, yes.

the d in hablado, the ra in para, etc.), i.e., the reversal of those features that they consider to mark informal Puerto Rican usage.

On further probing it became clear that several of my interlocutors made a distinction that was more refined than the mere dichotomy "better Spanish" vs. "folksy Spanish". Even further removed from "better Spanish" than "folksy Spanish" were other varieties which were referred to as slangy and as jíbaro. The former was coarse and uncouth and even foul whereas the latter was the quaint and archaic speech of poor mountain folk in Puerto Rico. None of my interlocutors claimed to currently use either slangy or jíbaro speech except for metaphorical purposes, although a few admitted to having used these varieties extensively in their childhood.

Knowing how sensitive my interlocutors were about "better Spanish" I wondered whether they might even claim for themselves the th sound which is the hallmark of Castilian pronunciation of z (as in azul) and c before e or i (as in cinco or entonces). This sound has been displaced by the Andalusian s throughout all of Latin America, although there is still some use of th among "blue bloods" and on the most formal occasions. Would Puerto Rican intellectuals in New York claim to use it as a symbol of their devotionto the "best Spanish"? The answer was an overwhelming "no." The Castilian th was considered stilted, snobbish, unauthentic, and downright indefensible for any real Puerto Rican. Only two of my interlocutors, both of them elderly autodidacts who earned their living by working at rather low status pursuits, claimed to "cecear" (i.e., to use the th) not only when reading their poetry but whenever they interacted with a reasonably intelligent Puerto Rican. It seemed to me (and

Tape F201

CM. Oh, no, no, no. When I recite poetry, that's the only time that I pronounce the z's and the c's that way...But otherwise, I never I keep my Latin American pronunciation. I spend enough time in Madrid to know how to change my pronunciation, but I didn't want, no, no, I didn't fall for that. Because that's not me. No, I am supposed to be Spanish American, so I will die being a Spanish American.

F. Can one be a real Puerto Rican and "cecear"?

CM. No, no. The Spanish American people consider that artificial. Many Spanish American people love just to change their pronunciation, but they are affected. So, instead of impressing us as they would with, they impress us in, you know...artificial, completely artificial.

my taped conversations amply confirmed this impression) that these two gentlemen admired the Castilian th much more than they used it and that both their admiration and use were related to a need to feel more noble than either their surroundings or their recognition permited.

"Better English"

Whereas Puerto Rican intellectuals in New York both recognize and utilize several varieties of Spanish the same repertoire range does not apply to their claims with respect to English. Only 5, including the three American born, claimed both a more "folksy" and a "better English." The rest claimed only one kind of English, five claiming only a folksy or popular kind and 10 only a polished kind (that they considered not really appropriate for relaxed conversation). Both of the latter claims are indicative of the limited kinds of English-speaking interaction networks in which most Puerto Rican intellectuals in New York are involved. Half have no intellectual or high culture contacts via English. A quarter have no informal or friendship contacts in that language. Thus my Puerto Rican interlocutors were telling me directly that, by and large, they could use Spanish much more sensitively, with more contextual variation, than they could use English. Indirectly, they were telling me much more than that about their lives in New York.

The Younger Generation

I already had two clues that the younger generation of Puerto Ricans in New York--those that had been born here or had arrived here at an early age (at least before entering junior high school)--might be different than the older generation. In the first place the American born intellectuals in my sample reported a different language usage pattern than did the others. In the second place most of my interlocutors reported that they usually spoke English to members of the 2nd generation since the latter preferred English to Spanish and, indeed, sometimes knew very little Spanish. As a result of these two clues I decided to probe further into the intellectuals' view of the younger generation of Puerto Ricans in New York.

With two exceptions--neither of them American born--my interlocutors declared that they wanted their children to be able to speak Spanish fluently. One intellectual reported that his youngest child (American born) could only understand Spanish but could not speak it. Another reported that he would want his future offspring to speak Spanish if he could be convinced that bilingualism did no psychological damage. Five of my sample claimed that they spoke only in Spanish with their children. Fourteen claimed that they spoke Spanish as much or more than they spoke English to their children. Only one reported speaking more English than Spanish to his children--"because he (the child) was born here and his Spanish is pretty weak."

The picture that Puerto Rican intellectuals present of their own children is quite an optimistic one, as far as Spanish language maintenance is concerned. The picture that they present of "Nuyorquinos" (the term applied to those of Puerto Rican origin that have been born or raised in New York) in general is a far less rosy one. Only one in my sample reported that most Nuyorquinos can speak and understand Spanish without difficulty, although the kind of Spanish they use is heavily anglicized. A clear majority (60%) reported that most Nuyorquinos "understand everything but speak very haltingly." Four reported that most can only understand or speak a little. One claimed that most Nuyorquinos can neither understand nor speak Spanish.

Tape F190

GV. Although they speak Spanish they don't speak it too well. They speak more and more English and they're getting away more and more from their diet, you know, eating more on the outside, being associated with non-Puerto Rican friends. So you know, the customs begin to wear off or, at least, being modified in some way. Many of the young Puerto Ricans that I am associated with, born here, who never been to Puerto Rico and finding themselves out to be Puerto Rican, they want to be Puerto Rican, and many of them are learning Spanish fast because they feel that they miss something.

F. Can they engage in an everyday conversation?

GV. Not really, no.

My interlocutors differed greatly in their explanation of the low degree of Spanish proficiency among Nuyorquinos but were unanimous in regretting the state of affairs that obtained. As for the next 20-30 years, the majority believed that most Nuyorquinos would remain bilingual but that their Spanish would become even less good and less effortless as time went by. What could be done to avoid this sad state of affairs? Somewhat more placed their hopes on improved and intensified Spanish language programs in New York City schools than upon anything that Puerto Rican parents or organizations themselves might do. Since the time of my interviews with them Congress has adopted the Bilingual Education Act and authorized $15,000,000, $20,000,000 and $45,000,000 for fiscal years 1968, 1969 and 1970. Who knows? My Puerto Rican interlocutors might yet be right. The American school might yet come to play as significant a role on behalf of language-maintenance among future generations of minority group children in the United States as it played on behalf of language shift in previous generations. At any rate, it is quite evident that my interlocutors did not feel that the Puerto Rican community itself could do the trick; almost all of them recognized a personal responsibility to help strengthen Spanish among Nuyorquinos. Several had successful experiences to report with respect to their efforts in this very connection. Nevertheless few were involved in such efforts to any great extent and fewer still felt that such efforts had either great impact or great community support.

Tape F76

ER. I wanted to get more involved with them...and the first time I walked into the room--this was on my own time--this room was so noisy. The music was just horrible--it was so loud, there were too many people, too many children, too few boys. It wasn't very well organized and I said to myself "I don't belong here." It's very easy, you see, once you get an education, if you don't live in a place that's too bad, that's predominantly Puerto Rican. There's going to be a very big gap that you have to overcome. I just had to walk out of there. I had a headache. I couldn't take it. I couldn't stand the music. I had to leave. However, as I got to know them I felt, you know, I had more in common with them. I don't want this gap to broaden. If I had something to contribute...I would say, gee this is what ought to be done, this is what has to be done.

What is Puerto Rican about Puerto Rican Intellectuals?

"Intellectuals of all countries, Unite!" has never been a formal rallying cry, certainly not to the extent that its proletarian counterpart has been. Nevertheless, there is a pan-Western intellectual world with a climate and culture all its own, a climate and culture that is supra-ethnic and supra-national. That being the case, how do Puerto Rican intellectuals relate to Puerto Ricanness on the one hand and to the intellectual culture on the other. Are they primarily Puerto Ricans who are serving their community and linked to it behaviorally, conceptually and attitudinally (as I had assumed), or are they primarily intellectuals who happen to be Puerto Ricans (as some seemed to be, the more I got to know them)?

My first approach to this area of inquiry was via the topic of leisure time pursuits. How do Puerto Rican intellectuals spend their spare time? Is there anything Puerto Rican about the nature or content of these pursuits?

I discovered that reading the Spanish dailies, other Spanish reading and Puerto Rican social group participation were the most widespread Puerto Rican leisure activities among my interlocutors. On the other hand, Spanish radio, TV and movies were more frequently rejected than they were sampled, the usual view of them being that they were too coarse, too comercialized, too poor in quality to merit attention. Indeed, even the local Spanish press was thoroughly

Tape F45

F. Is it a good paper?

HL. It's not very good; not too good. They need to improve.

F. In what way?

HL. I think that the news that they have are the old news from the English paper. Also they like spectacular. They publish crimes and they publish all these things. They do not have literary page and they do not discuss something that can help the people about culture or literature or some of these aspects.

F. So why do you buy it?

HL. I buy it because I want to know the activities of the community. I must know what's happening this and what's happening in the other one. Also I send notes to the paper if I have an activity and I invite the photographers to come.

panned by my interlocutors--particularly for its penchant for violence and for its careless Spanish--but the press was at least attended to in order to find out what events were planned within the Puerto Rican community and in order to read one or two "decent writers," whereas the local Spanish radio and TV were reported as having no saving graces whatsoever.

By contrast, American/English language and leisure activities were both more prevalent as well as more positively evaluated among my interlocutors. Newspaper and other reading again constituted the two most frequent leisure pursuits. Both were claimed more frequently than their Puerto Rican/Spanish counterparts. The same was true for American/English radio, TV and movies. Only social group participation ("sitting around with friends and talking, eating, drinking, maybe a little dancing...") was far more prevalent in the Puerto Rican/Spanish context than in the American/English one. Clearly, a majority of my interlocutors claimed more American/English leisure pursuits than Puerto Rican/Spanish ones and, in addition, were more favorably disposed toward the former than toward the latter.

My next probe in this subtle area was to ask my interlocutors about the Puerto Rican ethnic behaviors that they observed. Here I was met by a considerable degree of hemming and hawing and, finally, by an admission that other than eating Puerto Rican foods and engaging in extensive family visiting my interlocutors claimed almost no Puerto Rican customs, holiday celebrations or other behaviors characteristic of Island life (compadre relationships, traditional celebrations, shopping at bodegas, church attendance, etc.). In sum, the Puerto Ricanness of my interlocutors was hardly expressed at the level of daily or festive behavior and only weakly expressed at the level of leisure time pursuits. Rather than via either of the former modes, their Puerto Ricanness emerged--as it did most strongly in almost every case--in ideological and attitudinal terms. They did not feel that they had to be Puerto Rican in the "ordinary usage" because they were Puerto Rican via their art, their music, their writing and via their organizational leadership. Thus, in a sense, they had transmitted everyday ethnicity, the common garden variety of being Puerto Rican, into a more symbolic, a more consciously aware ethnicity. However, in the process of doing so, they may have lost

Tape F69

F. Is there anything about your home life that is Puerto Rican?

PM. Well, the food definitely. I try to cook with a certain Puerto Rican spice. Very definitely. Always. Even a steak. I marinate it, Puerto Rican style. Really, I do try to buy certain Puerto Rican spices.

F. Are there any Puerto Rican traditions or celebrations or customs that you maintain at home?

PM. Not particularly, no.

F. Do you attend Spanish services in church?

PM. No, I go to St. Patrick's. Only because it's near, of course. Sometimes we hate going there because there are so many people, people taking pictures, you know. But it's only three blocks away.

their ties with common, everyday Puerto Ricans and with the common, everyday problems of being Puerto Rican in a huge Anglo-American metropolis.

A clue to what may have been lost and what may have been gained by my interlocutors was provided by their replies to a question as to what made them Puerto Rican. Only half answered in terms of such ordinary criteria as parentage, birthplace and daily behaviors (including speaking Spanish). The others defined their being Puerto Rican more abstractly, i.e., in terms of attitudes, loyalty, appreciations and understandings in conjunction with Puerto Rican art,

Tape F40B

FO. No, its secondary. Like I was saying, everything is art, and then by birth I am Puerto Rican. By love, I'm Haitian, in a sense, artwise. I would say to you, I'm a hundred per cent Puerto Rican. Anyplace I go I say that, you know, even if I go to Timbuctoo or China. But I put my feelings first. Not my feelings as Puerto Rican, as an artist. I feel art the Haitian way, or the old Spanish way, or even the Greek way, you know, or even Byzantine way. But when it comes to, when I separate art from the rest, I'm Puerto Rican 100%. But as I say, my life is art, you know, and it's hard for me to separate them. Only when I'm with my family.

Tape 62

F. What makes you Puerto Rican? In what way are you?

FP. I was born in Puerto Rico, I was raised in a Puerto Rican environment and circumstances beyond my control brought me here but I will always retain my sense, my sentiment of being Puerto Rican.

(continued)

F. But how do you go about being Puerto Rican everyday in New York?

FP. Everyday convinces me again that I must continue being Puerto Rican in order not to lose my Puerto Rican identity. I am aware that I will never be a North American, no matter how long I stay here. In my blood I am from the Caribbean.

F. Isn't there anything you have to do to be a Puerto Rican here in New York?

FP. Naturally, one must always be on the go on behalf of our culture, our customs, our traditions, our principles.

music, literature, history or culture more generally. Thus we see that most intellectuals not only no longer claim to observe Puerto Rican ethnic behaviors but that many no longer think of themselves as being Puerto Rican in those terms. Indeed in about a third of all cases there was also a deprecation of the daily customs, practices and rounds of everyday, common-man Puerto Ricanness. Puerto Ricanness of this latter kind was often associated with superstitions, backwardness, ignorance, etc., i.e., with lower levels of society and more primitive levels of Puerto Rican culture than those attained by my interlocutors.

Such views may explain why more than half of my interlocutors also prescribed organizational activity, greater ideological conviction, increased cultural understanding and similar high level abstractions when asked what ordinary Puerto Ricans needed to do in order not to lose their Puerto Ricanness in the "Babel of Iron." Most intellectuals have not only transmuted their own Puerto Ricanness into more modern and intellectually more satisfying forms and expressions but they view these forms and expressions as essential for the common Puerto Rican in New York as well. There is little interest among Puerto Rican intellectuals in New York in preserving and combining everyday ethnicity with the convictions and appreciations of High Culture. Rather, there is the frequent assumption that the common man too must set aside his superstitions and outmoded behaviors and rise (or be elevated) to a new level of Puerto Ricanness which, like that of the intellectuals themselves, is based upon organized and ideologized loyalties, understandings and appreciations.

And what is the role of the Spanish language in the new and higher Puerto Ricanness? It was accorded a crucial role by all but two of my interlocutors (one of whom was American born and one of whom was not). Without maintenance and mastery of Spanish the overwhelming majority of my interlocutors could not conceive of attaining Puerto Rican knowledge and maintaining Puerto Rican identity among the masses of Puerto Ricans in New York. The Spanish language is also a symbol in itself. It represents a royal road to self-pride and self-identity for a people surrounded by English-speaking wealth,

Tape F64

BA. God forbid that there ever come the day when Puerto Ricans lose their Spanish. It would be a tragedy. Hell! Such a beautiful treasure as that which Spain gave us - to lose it? - no! Never!

F. Can't you imagine someone being Puerto Rican without knowing Spanish?

(continued)

BA. I can imagine many things. I can imagine reaching the moon. Maybe it _is_ possible to make a Puerto Rican without Spanish but I won't be in this world by the time that day arrives, if it ever does.

Tape F133

GR. Sure, one should speak as many languages as one can, but one must have one's own language and be integrated in the society to which it pertains in order to serve it.

F. Can't one be Puerto Rican without knowing Spanish?

GR. Without Spanish one can say "my parents are Puerto Rican, my grandparents are Puerto Rican" but I doubt whether one can say "I am Puerto Rican." Without Spanish one can respect Puerto Rican culture and eat whatever it is that mama put on the table, but that's about all.

English-speaking prejudice, and English-speaking educational and occupational pressures. Actually, the Spanish language is the major link that unites intellectual and common Puerto Ricans in New York. It is the only aspect of everyday ethnicity that has been directly accepted and transmuted by the intellectuals--even though it has not yet become a cause célèbre amongst them in and of itself--at the same time that it continues to function at a lower level of purity and elegance among most of the common folk.

Puerto Rican and American Culture

Three-quarters of my interlocutors felt that Puerto Rican culture and American culture were in conflict but that the conflict could be overcome and the two cultures combined. The nature of the conflict was usually stated in terms of different values (e.g., philosophical, sentimental vs. pragmatic, practical) and, therefore, in terms of the different behaviors that flowed from these values (e.g., respect behavior toward women and toward the old vs. aggressive competitive behavior toward one and all). However, most typically my interlocutors not only believed that Puerto Ricans would and could arrive at a combination of both cultures in New York, but that a creative Puerto Rican culture would be maintained and developed here. The constant ties with the Island and the constant influx of new intellectual personnel were heavily relied upon in this connection. However other factors too were mentioned as legitimizing

Tape F40D

GA. Today, Puerto Ricans are more knowledgeable. Not only because they live in the United States but because even in Puerto Rico the Universities are organized along American lines. There is no conflict in their minds. Puerto Ricans today have an appointment with North American culture. An appointment, not a conflict. Conflict exists only where there is negativism. Puerto Ricans are partially Americans wherever they are, here or there. American influence is part of them now.

F. But will they remain creative, as Puerto Ricans?

GA. We have them right here in New York. And even when they live here and lead their lives here, they write in Spanish, writers, poets. For example, VF, he is a young fellow and by the way he has a tremendous future if he cultivates himself and tries to struggle.

the optimism with which my interlocutors faced the future of Puerto Rican culture in New York: the growing opportunities for instruction in Spanish at the elementary and secondary levels, the purportedly increased interest in learning Spanish among Anglo-New Yorkers, the growing organizational unity and strength of the Puerto Rican community in its efforts to obtain a larger cut of the anti-poverty funds, etc. All of these trends were interpreted as implying the establishment of a permanent community whose life would necessarily become somewhat different from that on the Island, but whose life would also continue to be importantly, creatively and positively Puerto Rican.

Perhaps this long term positiveness with respect to the future of Puerto Ricans and Puerto Rican culture here in New York explains why only two of my interlocutors had definite plans to resettle in Puerto Rico. Five others had indefinite plans along the same lines. All of the others seemed to feel that Puerto Rico was a grand place to visit but that they could no longer live there. Surrounded as they

Tape F23

F. Would you ever consider returning to settle permanently?

MC. My soul is here now. I love New York. I love Riverside Drive. I look at the river every morning. I love my brother in Puerto Rico and I love it when I go there, but I would have to re-adapt myself. When I go there, that's a wonderful vacation. But I don't know if it is because I now am different. I sort of don't meditate any more when I go there. Here I have power to meditate when I want to.

were by English/American--or, perhaps because of this very fact--New York provided more stimulation, more opportunity and more freedom than they could find on the Island. Although their social contacts with the English/American world are minimal (as they are also for intra-group intellectuals among Jews, Ukranians, Poles and other minority groups in New York and in America as a whole) their home was now here. For most Puerto Rican intellectuals in the City, New York is a good place to live, but they wouldn't visit there.

Chapter
II-3-b

PUERTO RICAN INTELLECTUALS IN NEW YORK: QUANTITATIVE ANALYSES OF TWENTY BILINGUAL INTERVIEWS

Joshua A. Fishman

Introduction

A representatively heterogeneous group of 20 Puerto Rican artists, writers, singers, musicians and organizational leaders were interviewed as part of a study of Puerto Rican bilingualism in the New York City Area. The interviews were designed to tap (a) claimed use of English and Spanish, (b) attitudes toward English and Spanish, (c) attitudes toward being Puerto Rican and (d) attitudes toward being American. The interviews typically lasted more than two hours and were conducted for one hour or so in English and for another hour or so in Spanish. A report of the prevalence of various claims and views has appeared elsewhere.[1] The present report deals with the clusters of replies and individuals noted, as well as with the differences obtaining between Puerto Rican intellectuals and ordinary Puerto Ricans in New York with respect to several of the items covered by the interview. In general our interest in Puerto Rican intellectuals stems from our desire to know whether language and culture ideologies are present and elaborated among Puerto Rican intellectuals and whether these ideologies are shared by ordinary Puerto Ricans in the Greater New York City area.

Factor Analysis of Items

The twenty interviews completed were subjected to a detailed content analysis. The content analysis examined and coded all replies to 116 questions, 48 of which were included in sufficient interviews to be usable for the purposes of an R factor analysis. The verimax orthogonal rotation procedure yielded a five factor solution which seemed preferable to solutions based upon either fewer or more factors.[2]

Table 1 indicates the five factors obtained, lists the items located on each factor and shows their primary loadings. On the basis of a consideration of the items on each factor the factors have been named as follows:

Factor 1: Spanish dominance and versatility without rejection of English.

Factor 2: Ideological-activistic approach to Spanish language maintenance, although English repertoire is available.

Factor 3: In the context of Spanish positiveness, a basic concern with Puerto Rican and American cultures as a whole rather than primarily with languages.

Factor 4: Familiarity wihh American behaviors and awareness of American pressures on Puerto Rican adults and children in New York City.

Factor 5: Sociolinguistic sophistication: contextual communicative appropriateness in the use of varieties of Spanish; intellectualization of language and Puerto Ricanness.

Given the fact that Puerto Rican intellectuals in the New York City Area are far more restricted in their range of claims and attitudes than is the entire Puerto Rican speech community of which they are a part, the five factors obtained would seem to reflect important nuances that may help us differentiate within the intellectual community, small though it be.

From the point of view of sociolinguistic theory it is particularly

Table 1

FACTOR ANALYSIS OF INTERVIEW RESPONSES (n=20)

Factor I

Item #	Item	Loading
001(1)	Speaks both Spanish and English to many bilingual PR interlocutors	-.87
002(2)	Speaks Spanish only to many bilingual PR interlocutors	.87
004(7)	Claimed personal repertoire in Spanish	.65
018(32)	Reading utopia: primarily Hispanic in language and content	-.64
009(13)	Awareness vs. claimed repertoire in English: uses fewer varieties than is aware of and not interested in other	-.43
047(111)	Why do some Nuyorquinos feel bothered about being PR: negative image of PRs	.43
030(68)	Use of English only where Span (or Span and Eng) expected would be interpreted negatively	-.40
010(17)	Comparison between claimed repertoire in Spanish and English: Spanish> English (English = 1 variety only)	.37

Factor II

Item #	Item	Loading
027(62)	Advances personal, accomodative reasons for speaking Spanish only to bilingual PR interlocutor	-.73
008(12)	Personal repertoire in English	.72
034(77)	PRs to whom "folksier" Spanish is spoken: invarying use with those mentioned	.71
026(61)	Advances ideological reasons for speaking Spanish only to bilingual PR interlocutors	.63
020(36)	Are some daily behaviors necessary to be PR? No, or deprecation of daily behavior	-.63

Factor II (con't.)

Item #	Item	Loading
015(27)	Accepts personal responsibility for strengthening Spanish among Nuyorquinos	.52
014(25)	By and large, Nuyorquinos will maintain some familiarity with Spanish	.49
003(4)	Bilingual PRs to whom English is usually spoken: none	.38

Factor III

Item #	Item	Loading
033(74)	What makes "better" Spanish better: vocabularly, grammar, pronunciation	.76
035(80)	What makes "folksier" Spanish folksy: vocabularly, grammar, pronunciation	.66
019(34)	Reading utopia is not primarily hispanic (technical/cultural reading in English or other language)	-.59
021(40)	Can PR and American culture be combined: yes	.59
036(83)	Intended or actual practice with children: Spanish only	.58
006(9)	Uses fewer varieties in Spanish than is aware of and has no interest in learning the others	-.56
028(64)	Opinion about speaking Spanish only to some bilinguals: no concern	-.53
005(8)	Awareness vs. claimed repertoire in Spanish: uses all varieties of which aware	.47
022(42)	Can a creative PR culture be maintained in New York? Yes, but only in Spanish	-.46
013(23)	Can most Nuyorquinos understand and speak Spanish? Understand everything but speak poorly	.42
037(89)	Opinion re Nuyorquinos who do not understand or speak Spanish: negative due to identity loss	.41

Factor III (con't.)

Item #	Item	Loading
029(66)	Has no concern about speaking Spanish and English to some PRs	-.36
048(114)	Conflict between PR and Amer culture: yes, re behaviors other than language	.33

Factor IV

Item #	Item	Loading
012(19)	Respondent does not now have children; wants prospective children to understand and speak Spanish	-.82
011(18)	Respondent has children and all of them both speak and understand Spanish	.73
039(94)	Why some Nuyorquinos don't know Spanish: American pressures	.71
023(50)	Feels as much at home with some Americans as does with Puerto Ricans	-.65
040(95)	Why some Nuyorquinos can't understand and speak Spanish: parent's fault (i.e., not merely disorient.)	-.53
046(107)	How important is Spanish in being Puerto Rican: important re obtaining knowledge	.49
045(105)	What must ordinary PRs do to remain PR?: (daily) behavior, language use, organiz. memb.	.48
016(28)	Comparison between PR and Amer leisure time activities: Amer> PR	.41
041(97)	Number of PR leisure time participations	.37

Factor V

Item #	Item	Loading
017(29)	Evaluation of Spanish press, radio, T.V.: all negative	-.69
031(72)	To whom is "better" Spanish used: contextually	.69
044(100)	What makes respondent a PR: birthplace and parentage	-.68

Factor V (con't.)

Item #	Item	Loading
032(73)	To whom is "better" Spanish used: always (i.e., not contextually)	-.62
024(54)	Bilingual PRs to whom Spanish was spoken during past two days: work and ALI colleagues	.61
043(99)	Number of American leisure time participations	.53
025(57)	Contextualized use of Spanish to bilingual PR interlocutors	.48
042(98)	Number of PR daily ethnic behaviors	.42
038(93)	How to improve the long-range future of Spanish among Nuyorquinos: it's up to the schools	.39
007(10)	Attitude toward "cecear": negative, stilted	.29

interesting to note that the factor that pertains to Spanish dominance and versatility does not imply the rejection of English. This coexistence of two languages is indicative of a diglossic community rather than merely indicative of individual bilingualism. A further indication of diglossia is the factor that deals with communicative competence rather than with Spanish alone. The ability to vary between "folksy" and "better" Spanish as well as the ability to vary between Spanish and English, and to engage in such variation in accord with the speech community's norms of communicative appropriateness, is the basic indicator of a diglossic speech community in which each language and variety has its legitimate functions.

It is interesting to find Spanish language dominance (actual use), ideologization of Spanish language maintenance, and sophistication with respect to communicative appropriateness as separate factors on the one hand, and Puerto Rican cultural concerns plus American awarenesses as separate factors on the other hand. All in all these five factors seem able to provide an encompassing picture of diglossic intellectual speech networks.

Factor Analysis of Individuals

A Q analysis of all individual replies yielded two maximally distinct clusters of individuals. Table 2 reveals the differences between these two groups on four representative items selected from each factor.

On Factor 1, Q_1 individuals claim a smaller Spanish repertoire, claim to use fewer English varieties than those of which they are aware, claim less difference between the size of their Spanish and English

Table 2

Q GROUP DIFFERENCES ON SELECTED ITEMS

Item #	Factor #	Item	Q_1 (n=11)	Q_2 (n=9)
4	1	Claimed repertoire in Spanish (3=1 variety; 4=2 varieties; 5=3 or more varieties)	3.73	4.33
9	1	Uses fewer varieties than aware of in English and not interested in mastering the others	.82	.56
10	1	Claimed Spanish repertoire > claimed English repertoire (latter=1 variety only)	.27	.67
30	1	Use of English only where Span (or Span and English) is expected would be negatively interpreted	.36	.67
27	2	Ideological reasons for speaking Spanish only to bilingual PRs	.45	.33
8	2	Personal repertoire in English (1=1 variety; 2=2 varieties, etc.)	3.18	2.44
15	2	Accepts personal responsibility for strengthening Spanish among Nuyorquinos	3.82	2.11
3	2	Bilingual PRs to whom English is usually spoken: none	.55	.22
36	3	Actual or intended practice with children: Spanish only	.18	.44
28	3	Re speaking Spanish only to bilingual PRs: no concern	.36	.56
22	3	Can a creative PR culture be maintained in New York? Yes, but only in Spanish	.64	.44
48	3	Conflict between PR and American culture: yes, re behaviors other than language	.45	.22
39	4	Why some Nuyorquinos don't know Spanish: American pressures	.18	.56

Table 2 (con't.)

Item #	Factor #	Item	Q_1 (n=11)	Q_2 (n=9)
46	4	Is Spanish important in being PR? Yes, for obtaining knowledge	.27	.56
45	4	What must ordinary PRs do in order to remain PR in New York? Behaviors (customs, language, organizations)	.27	.67
41	4	Number of PR leisure time participations	2.00	3.22
31	5	To whom is better Spanish used: contexual variation	.27	.44
17	5	Evaluation of Spanish press, radio and T.V. in New York: all negative	.55	.33
24	5	Bilingual PRs to whom Spanish was spoken during past 2 days: work and ALI colleagues	.27	.44
43	5	Number of American leisure time participations	2.00	3.56

repertoires, and less frequently claim that their bilingual interlocutors would react negatively if they spoke English to them when Spanish alone or Spanish and English was expected. All in all Q_1 individuals score lower on Factor 1 ("Spanish dominance and versatility").

With respect to Factor 2, Q_1 individuals are more ideological in explaining their use of Spanish-only with bilingual Puerto Ricans, they more frequently accept personal responsibility for strengthening Spanish among Nuyorquinos and they more frequently claim that there are no bilingual PRs with whom they speak English, all of the foregoing notwithstanding the fact that they claim a larger personal repertoire in English. In general Q_1 individuals score higher on Factor 2 ("Ideological-activistic approach to Spanish language maintenance") even though they score lower on those factors that are more behaviorally than attitudinally focused on language.

On Factor 3 the previously noted differences between Q_1 and Q_2 are further confirmed. Whereas Q_1 members less frequently claim to speak Spanish-only with their children they more frequently claim that a creative Puerto Rican culture can be maintained in New York and that a conflict between Puerto Rican and American culture exists. The fact that Q_1 is less concerned about speaking Spanish-only to bilingual Puerto Ricans is another indication among many that Q_1 members are less focused upon language per se and more concerned with broader topics such as Puerto Rican culture with which Factor 3 is largely concerned.

As far as being aware of the pressures of the American environment (Factor 4) Q_1 members less frequently blame the American environment for the fact that some Nuyorquinos don't know Spanish. On the other hand they claim fewer Puerto Rican leisure activities and less frequently make behavioral recommendations with respect to what ordinary Puerto Ricans must do in order to remain Puerto Rican in New York.

Finally, with respect to sociolinguistic sophistication and claimed contextual sensitivity (Factor 5) Q_1 members again score lower. They less frequently claim contextual use of better Spanish and less frequently claimed to have used Spanish with co-workers or with other Puerto Rican intellectuals during the two days prior to being interviewed. In addition, their reactions to all three Spanish mass media are more frequently negative.

To summarize, Q_1 members make fewer claims with respect to their own Spanish dominance and versatility and more frequent claims with respect to ideologized Spanish language maintenance. They more frequently subscribe to items which imply a greater concern for Puerto Rican culture--as an intellectual-ideological construct--than for language. They claim greater familiarity with and acceptance of American behaviors and realities and less sociolinguistic sensitivity and sophistication. All in all, the distinctions between Q_1 and Q_2 seem to be along an ideological-behavioral continuum. Q_1 members are Puerto Rican primarily in ideological, intellectual, eclectic ways. In a sense, they are intellectuals, artists and organizers primarily and behavioral Puerto Ricans only secondarily. Q_2 members are practicing Puerto Ricans, linguistically and behaviorally, without any rejection of American practices in the sphere of leisure activity. They are less strident ideologically and far less well known outside of the Puerto Rican community. They are primarily Puerto Ricans who serve their community as artists, writers, and organizers. They do not view their services or the pains and pleasures of being Puerto

Rican in New York in sharp or grand ideological terms. They simply are Puerto Rican and, therefore, need not protest that they are or should be.

Demographic Differentiation

The Q groups differ demographically (See Table 3) as well as behaviorally-attitudinally, and these two kinds of differences both reinforce and clarify one another. Q_1 individuals tend to be younger than Q_2 individuals; they are more frequently American born, and, if Puerto Rican born, less frequently of small town or rural origin. A slightly larger proportion of Q_1 individuals has received higher education but a substantially larger proportion obtained their education in the continental USA. Finally, Q_1 individuals have more frequently experienced positive social mobility in the USA vis-a-vis their father's occupation in Puerto Rico. All of these characteristics of Q_1 members (greater youth, American or large city birthplace, more education, American education, and greater occupational success) help explain the greater ideological and intellectual but lesser behavioral Puerto Ricanness and Spanish maintenance orientation of Q_1 members noted previously.

Some Contrasts between Ordinary Puerto Ricans and Puerto Rican Artists, Leaders and Intellectuals.

Roughly 20% of the items discussed with our sample of 20 intellectuals were also included in a series of 32 interviews with Puerto Rican males living in a Puerto Rican neighborhood in Jersey City, N.J.[3] As a result, it is possible to compare several response distributions in these two very different populations, even though

Table 3

DEMOGRAPHIC DIFFERENCES BETWEEN Q GROUPS

Demographic Variables		Q_1 (N=11)	Q_2 (N=9)
Age	: - 39	54%	33%
	:40 - 59	27	56
	:60 -	19	11
Birthplace	:USA	18%	--
	:San Juan	27	22%
	:Large Cities(>10,000 pop.)	45	22
	:Small Cities or towns	9	22
	:Rural areas	--	33
Education	:Elementary	9%	11%
	:Secondary	19	22
	:College	45	45
	:University	27	22
Education	:Continental USA (highest)	55%	33%
	:Puerto Rico	45	67
Occup.Mob.	:Same as father's	45%	33%
	:Higher than father's	55	56
	:Lower than father's	--	11

the respective factor structures in which the items are imbedded are quite different.

Contrasts pertaining to the Spanish Language

In the intellectual sample (ILA) the lion's share of our respondents (60%) mentioned work and professional colleagues as being among those with whom they had spoken Spanish in the past two days. Family, friends, and neighbors occupied a secondary place (40%) in this connection. In the ordinary Puerto Rican (OPR) sample these two proportions are reversed. Spanish is primarily claimed as the language of family, friends and neighborhood (58%) and far less frequently as the language of work. This difference, as obtained from informal interviews, is in aggreement with differences disclosed by all other reports of the Bilingualism Configuration Study (census, word naming, word association, word frequency estimation, Spanish usage rating, etc.) which disclose the dominance of Spanish in home and neighborhood contexts rather than at work. However it is not primarily the validity and reliability of the OPR data that is of interest at this point but the fact that for the ILA network within the Puerto Rican speech community of New York Spanish has a major function that it does not have in the community at large. For Puerto Rican artists, community leaders and intellectuals in the Greater New York area Spanish is not primarily the language of hearth and home, of family and friends, but, rather, the language of work, of professional activity, of association with others in task-oriented ways.

This difference in primary function accompanies many related differences in attitude and belief. Ordinary Puerto Ricans tend to define "better Spanish" much more frequently in terms of vocabulary, grammar and pronunciation (85%) than do artists, leaders and intellectuals (55%). For the latter group "better Spanish" is also thought of in terms of lack of interference and in terms of esthetic qualities (45%), considerations that are almost lacking in the awareness of ordinary Puerto Ricans. Both groups agree, however, in specifying that they primarily attempt to use "better Spanish" with educated interlocutors and with Latin Americans or Spaniards whose opinion of Puerto Rican Spanish is all too poor. Of course, the two groups differ greatly in the extent to which they claim to control a "better Spanish" and in the extent to which they claim to use it contextually. Artists, leaders, and intellectuals claim to speak "better Spanish" and "folksy Spanish" with many of the very same interlocutors, depending on the requirements of situational and metaphorical use. Ordinary Puerto Ricans who claim to control a "better Spanish" claim to use it on a go-no go basis, that is, not to use it at all with their family and friends and to use it invariably with educated interlocutors and with non-Puerto Rican Hispanos.

Obviously, ILA members associate "better Spanish" with open networks in which they interact both on a personal and on a transactional basis. OPR members associate "better Spanish" only with closed networks in which only transactional interactions are available to them.

Our two samples also differ markedly in the extent to which they report that knowing Spanish is necessary in order to be Puerto Rican (Table 4). This view, indicative as it is of conscious language loyalty and language ideology, is far more prevalent among the intelligentsia than among the common man. Of course "knowing Spanish" may mean something

Table 4

IS IT NECESSARY TO KNOW SPANISH TO BE PUERTO RICAN?

Response	OPR (N=32)	ILA (N=20)
No	20 (62%)	2 (10%)
Yes	12 (38%)	18 (90%)

quite different to these two non-overlapping networks of speakers. That this is the case is indicated by the responses obtained to our query as to whether there were many Nuyorquinos who neither spoke nor understood Spanish. As Table 5 reveals, the vast majority of ordinary Puerto Ricans reported that most Nuyorquinos speak and understand Spanish without real difficulty. At the same time an equally impressive majority of intellectuals reported that most Nuyorquinos speak Spanish poorly. Thus the intellectual's position that knowing Spanish is needed in order to be Puerto Rican may be, in part, a critique of the level and purity of the Spanish controlled by most Nuyorquinos. Be this as it may, we are still left with the obvious conclusion that ordinary Puerto Ricans may not only have less demanding interpretation of what "knowing" Spanish means, but that they also widely believe that "knowing" Spanish, even at that more minimal level, is not absolutely necessary in order to be Puerto Rican in the New York City area.

Finally, our two samples also differ markedly in their view of how the mastery of Spanish might be improved among Nuyorquinos. Among ordinary Puerto Ricans the most prevalent view is that "it's up to the parents"(53%), followed closely by the view that "no improvement is necessary or possible" (33%). Only 14% believed that the schools could help in this connection. Among intellectuals the most prevalent view is that "it's up to the schools" (45%), with another 25% placing their hope in the activities of various Puerto Rican organizations. Only 30% reported that parents could be of much help in this connection. Thus, each group is focused primarily on the world that it knows and controls. Common folk place their trust in the family. Intellectuals

Table 5

ARE THERE MANY NUYORQUINOS WHO DO NOT SPEAK OR UNDERSTAND SPANISH?

Response	OPR (N=29)	ILA (N=20)
Yes (many do not understand)	2 (7%)	1 (5%)
Most understand but speak poorly	3 (10%)	14 (70%)
Most understand little and speak poorly	3 (10%)	4 (20%)
Most speak and understand without real difficulty	21 (73%)	1 (5%)

place their trust in the intellectual institutions of the community.

Contrasts pertaining to Being Puerto Rican

As might be predicted, the common man replied to our inquiry as to "What makes you a Puerto Rican?" by stressing the facts of birthplace and parentage (84%). Intellectuals, on the other hand, replied in terms of personal attainments. Most of them claimed that they were Puerto Ricans because of their attitudes, knowledge, sentiments and behaviors (65%) rather than because of such ascribed characteristics as birthplace and parentage (35%). A related difference of opinion obtains in connection with our query as to whether there is a "conflict between being Puerto Rican and being American." Ordinary Puerto Ricans overwhelmingly reply that no such conflict exists (89%). Intellectuals reply almost as overwhelmingly that such a conflict does exist (75%).

Obviously, the ordinary Puerto Rican is less exclusivistic and less ideologized all along the line. He does not believe that Spanish is absolutely necessary to being Puerto Rican, he sees his being Puerto Rican as a simple fact of ascribed status, he sees no conflict between that ascription of birth and parentage and his (or his children's) attainment of Americanness. The naturalness of being Puerto Rican, on the one hand, plus the conflictlessness of also being American, on the other hand, may explain why ordinary Puerto Ricans are so split about resettling in Puerto Rico. Nearly half claim that they definitely will resettle in Puerto Rico (47%). Among intellectuals the corresponding percentage is only 10%, the vast majority indicating no more than "maybe" or "no" to this question.

Discussion

Puerto Rican intellectuals in New York are obviously more ideologized and more demanding than the common Puerto Rican with respect to the needs of Puerto Rican cultural and linguistic self-maintenance in the New York City area. However, New York is also less frequently a way station for them. Unlike the ordinary Puerto Rican they are not here to save up some money or to improve their children's start in life. They are here primarily for their professional advancement or for service to their community. Many of them have outgrown the Island in terms of either professional or communal recognition. They are less likely to return and, perhaps as a result, are even more demanding and more critical with respect to the language and the culture of Puerto Ricandom in New York.

All in all, while language consciousness and language loyalty is generally at a low level among Puerto Ricans in the New York City area it is higher among intellectuals than it is in the Spanish daily press[4] and it is higher in the Spanish daily press than it is among ordinary folk. The intellectual's concern for language maintenance and language purity--low keyed though it is among Puerto Rican intellectuals in New York today, nevertheless represents a conscious and ideologized position. This position becomes progressively less pronounced and less coherent the further we depart from the small and rather exclusive circles of the intelligentsia and the closer we come to the Puerto Rican "man in the street" and the speech networks with which he interacts.

Summary

A factor analysis of coded interview data on 20 Puerto Rican intellectuals in New York City yielded 5 item-factors (R) and 2 person-factors (Q). The R factors dealt with Spanish language dominance, ideologized language maintenance, Puerto Rican cultural emphases, American awareness and sociolinguistic sophistication. The Q groups differed meaningfully and consistently on these 5 factors as well as on demographic background variables, particularly with respect to ideological vs. behavioral Puerto Ricanness and language maintenance orientations. In addition, intellectuals, as a group, were found to differ systematically from ordinary Puerto Rican males in their more ideologized positions with respect to Puerto Rican culture and Spanish language maintenance in New York.

Footnotes

[1] See Joshua A. Fishman, "Intellectuals from the Island," Chapter II-3-a in J. A. Fishman, R. L. Cooper, Roxana Ma, et al. Bilingualism in the Barrio, Final Report to DHEW under Contract OEC-1-7-062817-0297. New York, Yeshiva University, 1968.

[2] For the intercorrelations between all 48 items see Appendix II, Chapter II-3-b in Fishman, Cooper, Ma, et al., op.cit.

[3] See Gerard Hoffman, "Life in the Neighborhood: A Factor Analytic Study of Puerto Rican Males," Chapter III-2-a in Fishman, Cooper, Ma, et al., op. cit.

[4] See Joshua A. Fishman, "Puerto Ricans in Our Press," Chapter II-2 in Fishman, Cooper, Ma, et al., op. cit.

Appendix I

To what extent do (a) claimed repertoire range in Spanish and (b) positive views regarding the future of Spanish among Nuyorquinos go together?

The two self-reported characteristics mentioned above (one behavioral and the other attitudinal) *co-occur* in individuals who *share* a number of other claims and characteristics. These shared claims are listed in the middle columns of Table 6. Puerto Rican intellectuals who *both* claim a range of Spanish varieties *and* are attitudinally hopeful with respect to the long term maintenance of Spanish among Nuyorquinos also *more frequently* claim to (a) speak only in Spanish to (some) bilingual Puerto Ricans, (b) have only indefinite plans to resettle in Puerto Rico, and (c) be upwardly mobile in New York relative to their fathers on the Island. In addition, these same individuals do *less frequently* claim to (a) usually speak English to some bilingual Puerto Ricans, (b) control a repertoire of English varieties, and (c) engage in more American than Puerto Rican leisure activities.

In general then, those individuals who *both* claim a repertoire of Spanish varieties *and* have positive views of the long range future of Spanish among Nuyorquinos have improved their social status in New York without Americanizing linguistically or behaviorally and have only vague or indefinite plans about returning to Puerto Rico. These seem to include the most involved and prominent members of the Puerto Rican intellectual community. 70% of them are Q_1 members.

However, more than these two characteristics (claimed repertoire range in Spanish and positive attitude toward Spanish maintenance among Nuyorquinos) go together. They seem to be claimed differentially or separately by individuals who also *differ* in other respects. The

Table 6

SIMILARITIES & DISSIMILARITIES BETWEEN SUBJECTS DIFFERENTIALLY CLASSIFIED ON THE BASIS OF RESPONSES TO TWO INTERVIEW QUESTIONS

CLAIMING A REPERTOIRE IN SPANISH (TWO OR THREE VARIETIES RATHER THAN ONE)		PREDICTING A POSITIVE FUTURE FOR SPANISH AMONG NUYORQUINOS (RATHER THAN ULTIMATE LOSS)
- Years in USA	Speaks only in Span to (some) bilingual Puerto Ricans (=PRs) +	Years in USA +
	Usually speaks Eng to some biling PRs -	
	Claims a repertoire of Eng varieties -	
	Amer leisure activities > PR leisure activs. -	
- Organizational leaders	Indef. plans to resettle in PR +	Writers, poets +
- Father's education	Upwardly mobile relative to father +	Claimed repert. in Span > Eng -
+ Uses all Span varieties of which aware		Nuyorquinos understand everything, speak poorly +
- Recognizes personal responsibility to reinforce Span among Nuyorquinos		
- Reading utopia: Span		
+ PR and Amer cult. can be combined		

repertoire claimers (as compared with the non-claimers of a repertoire of Spanish varieties) have spent less time in the USA, they are not organizational leaders, they are not individuals whose fathers obtained much education, they do not recognize any personal responsibility to reinforce Spanish among Nuyorquinos, and their reading utopia is not limited to Spanish. They more frequently admit using all of the Spanish varieties of which they are aware (including the non-standard ones) and they more frequently believe that Puerto Rican and American culture can be combined.

All in all, those individuals who claim a repertoire of Spanish varieties without having confidence in the future of Spanish maintenance among Nuyorquinos tend to be older and less communally active. They maintain a live interest in Puerto Rican matters but they have abandoned their former active participation as a result of age, disappointment and other responsibilities. They are particularly uninterested in ideological Puerto Ricanness, whether linguistic or cultural. Their penchant for personal authenticity also removes them from the hubbub of organizational activity. Two thirds of them are Q_2 members.

Those individuals who hold positive views concerning Spanish maintenance among Nuyorquinos without claiming a range of Spanish varieties have been in the United States for more years, they tend to be writers or poets, they believe that Nuyorquinos understand everything said to them in Spanish even if they only speak Spanish poorly and they do not claim a larger Spanish repertoire than their claimed English repertoire. Actually, these are all individuals "of the old school", autodidacts, who are so proud of their painful mastery of standard Spanish that they disdain and disclaim the conversational varieties which they employ. They remain close to everyday Puerto Ricans, interact with them at work and arrange poetry recitals and other cultural events for them. They may be more acquainted with run of the mill Nuyorquinos as a result and, even though they consider themselves to be linguistically on a higher, purer level, they may more realistically and less judgmentally assess the Spanish of Nuyorquinos than do the more mobile and detached claimants of Spanish repertoires. Three quarters of the individuals in this category are Q_2 members.

Finally, we are left with those few Puerto Rican intellectuals who claim neither a repertoire of Spanish varieties nor confidence in the future of Spanish maintenance among Nuyorquinos. These are three women who are interacting little with Puerto Ricans, whether on an individual or organizational basis, and whose position as intellectuals vis-a-vis the Puerto Rican community is questionable or ambivalent in their own eyes. Two of the three are Q_1 members.

Appendix II: Item Intercorrelations

VAR/VAR	001	002	003	004	005	006	007	008	009	010
001	1.0000	1.0000-	.2500-	.6588-	.1712-	.2500	.1231	.0224	.3118	.3282-
002	1.0000-	1.0000	.2500	.6588	.1712	.2500-	.1231-	.0224-	.3118-	.3282
003	.2500-	.2500	1.0000	.0000	.3852-	.4583	.1231	.1346	.3118	.1231-
004	.6588-	.6588	.0000	1.0000	.2707	.2635-	.1297	.0000	.2817-	.2595
005	.1712-	.1712	.3852-	.2707	1.0000	.8987-	.2423	.2247-	.4346-	.1791
006	.2500	.2500-	.4583	.2635-	.8987-	1.0000	.1231-	.3142	.5791	.2872-
007	.1231	.1231-	.1231	.1297	.2423	.1231-	1.0000	.0718	.1535-	.1919-
008	.0224	.0224-	.1346	.0000	.2247-	.3142	.0718	1.0000	.6117	.4033-
009	.3118	.3118-	.3118	.2817-	.4346-	.5791	.1535-	.6117	1.0000	.2851-
010	.3282-	.3282	.1231-	.2595	.1791	.2872-	.1919-	.4033-	.2851-	1.0000
011	.1231-	.1231	.0821	.1297-	.2423-	.1231	.1919-	.2928-	.2851-	.1919
012	.2872	.2872-	.1231-	.0000	.1791	.0821-	.4141	.4806	.3728	.2121-
013	.1336-	.1336	.0891	.1408	.0229	.0891-	.0658	.1319	.1905-	.0658-
014	.0417-	.0417	.0417-	.2635	.0428	.0417	.1231	.4712	.0891	.1231-
015	.1149-	.1149	.2954	.1038-	.2823-	.1149	.0444-	.4485	.2017	.1979-
016	.0454	.0454-	.4990	.1434	.2213-	.2948	.1452	.0550-	.0242	.0335-
017	.0821	.0821-	.2872	.0000	.4530-	.5334	.0101	.2596	.1535	.2121-
018	.4708	.4708-	.0428	.2707-	.0989-	.1712	.0316	.3515	.4804	.2423-
019	.3282-	.3282	.2872	.0000	.4530-	.3282	.1919-	.0718-	.0658-	.1919
020	.1712	.1712-	.2568-	.0000	.0989	.1712-	.1791	.5820-	.2516-	.2423
021	.1336-	.1336	.1336-	.2817	.2516	.3118-	.0658	.0120	.1905-	.1535
022	.1231	.1231-	.1231	.2595-	.1791-	.2872	.0101-	.1823	.2851	.0101
023	.0891	.0891-	.0891	.2817	.0229	.1336	.2851	.1319	.2857	.0658-
024	.0428	.0428-	.0428	.1353-	.3407	.2568-	.0316	.0058	.0229	.1791
025	.2041-	.2041	.0000	.0000	.1048	.2041-	.1005	.0550-	.0000	.1005-
026	.4583-	.4583	.1667	.1318	.2568	.1667-	.1231	.3590	.0891	.1231-
027	.3282	.3282-	.0821-	.1297-	.1791-	.0821	.0101-	.4806-	.1535-	.2121
028	.5334-	.5334	.2872	.3892	.0316-	.1231	.0101	.0387	.0658-	.0101-
029	.1021-	.1021	.1531	.1614-	.4193-	.3572	.2010-	.0550	.2182	.0503-
030	.4083	.4083-	.2041-	.2582-	.1048	.0000	.3015	.0550-	.0000	.1005
031	.0428	.0428-	.1712-	.0000	.1209	.2568-	.0316	.2247-	.2059-	.3898
032	.1231	.1231-	.3282	.1297-	.1791-	.2872	.0101-	.2928	.2851	.5960-
033	.0821-	.0821	.0821-	.2595	.2423	.3282-	.2121-	.2596-	.1535-	.4141
034	.0000	.0000	.2041	.1291	.1048	.0000	.3015	.4947	.2182	.3015-
035	.1712	.1712-	.0428-	.1353	.0989	.1712-	.0316-	.1210-	.0229-	.2423
036	.1336	.1336-	.0891-	.2817	.4346	.3564-	.1535	.2519-	.2857-	.0658
037	.1231-	.1231	.3282-	.1297	.1791	.2872-	.3939-	.1823-	.2851-	.1919
038	.0821	.0821-	.0821	.0000	.0316-	.0821-	.2121	.0387	.1535	.2121-
039	.0428	.0428-	.0428	.1353-	.3187-	.1712	.1791-	.2247-	.2059-	.1791

	001	002	003	004	005	006	007	008	009	010
040	.2500-	.2500	.0417-	.2635	.4708	.3750-	.3282	.3590	.0891	.0821
041	.0381-	.0381	.1334-	.1808	.1810-	.1334	.0891	.1206-	.2750-	.3800
042	.0919	.0919-	.2526-	.2179-	.0826	.0230	.1018-	.1670	.1719	.0113-
043	.3340-	.3340	.2412-	.5868	.2001	.1299-	.2101	.0550	.1785-	.1553
044	.2568	.2568-	.1712-	.1353-	.0989-	.1712	.6005-	.1095-	.2516	.0316-
045	.3282-	.3282	.0821	.0000	.1791	.0821-	.0101	.1823-	.2851-	.3939
046	.2500-	.2500	.1667	.3953	.1712-	.2500	.1231	.1346	.1336-	.2872
047	.1712-	.1712	.1712-	.4060	.1209	.0428-	.0316	.2247-	.2059-	.1791
048	.4708	.4708-	.0428	.2707-	.1209	.0428-	.1791-	.1210	.2516	.0316-

VAR/VAR	011	012	013	014	015	016	017	018	019	020
001	.1231-	.2872	.1336-	.0417-	.1149-	.0454	.0821	.4708	.3282-	.1712
002	.1231	.2872-	.1336	.0417	.1149	.0454-	.0821-	.4708-	.3282	.1712-
003	.0821	.1231-	.0891	.0417-	.2954	.4990	.2872	.0428	.2872	.2568-
004	.1297-	.0000	.1408	.2635	.1038-	.1434	.0000	.2707-	.0000	.0000
005	.2423-	.1791	.0229	.0428	.2823-	.2213-	.4530-	.0989-	.4530-	.0989
006	.1231	.0821-	.0891-	.0417	.1149	.2948	.5334	.1712	.3282	.1712-
007	.1919-	.4141	.0658	.1231	.0444-	.1452	.0101	.0316	.1919-	.1791
008	.2928-	.4806	.1319	.4712	.4485	.0550-	.2596	.3515	.0718-	.5820-
009	.2851-	.3728	.1905-	.0891	.2017	.0242	.1535	.4804	.0658-	.2516-
010	.1919	.2121-	.0658-	.1231-	.1979-	.0335-	.2121-	.2423-	.1919	.2423
011	1.0000	.8182-	.2851-	.0821	.2060	.0782	.3939	.2423-	.1919	.0316
012	.8182-	1.0000	.1535	.0821	.0444	.1452-	.2121-	.3898	.2121-	.0316
013	.2851-	.1535	1.0000	.0891	.2894	.1455	.0658-	.4804	.2851-	.2516-
014	.0821	.0821	.0891	1.0000	.2133	.0680-	.2872	.2568	.3282-	.4708-
015	.2060	.0444	.2894	.2133	1.0000	.1920	.1252	.3076	.0364-	.3076-
016	.0782	.1452-	.1455	.0680-	.1920	1.0000	.1898	.0116	.0782	.1281-
017	.3939	.2121-	.0658-	.2872	.1252	.1898	1.0000	.0316-	.1919	.0316
018	.2423-	.3898	.4804	.2568	.3076	.0116	.0316-	1.0000	.6638-	.3407-
019	.1919	.2121-	.2851-	.3282-	.0364-	.0782	.1919	.6638-	1.0000	.2423
020	.0316	.0316	.2516-	.4708-	.3076-	.1281-	.0316	.3407-	.2423	1.0000
021	.0658-	.0658-	.2857	.3118	.0263	.0970-	.2851-	.0229	.2851-	.0229-
022	.0101	.0101	.1535-	.0821-	.2787	.1452	.2121	.0316	.0101	.0316-
023	.5044-	.5922	.2857	.0891	.0614-	.0970-	.1535	.4804	.2851-	.2059
024	.2423-	.1791	.0229	.1712-	.1138-	.1281	.6637-	.1209	.0316-	.3407-
025	.5025-	.3015	.0000	.2041-	.1206-	.3333-	.7035-	.1048-	.1005	.1048-
026	.0821	.0821	.1336-	.3750	.1313	.1814-	.0821	.1712-	.0821	.2568-
027	.0101	.1919-	.0658	.4924-	.2060-	.0335	.1919-	.0316	.0101	.3898
028	.0101-	.2121-	.2851-	.1231-	.0364-	.0782	.1919	.6638-	.3939	.0316
029	.2010	.3015-	.0546-	.1021-	.2211	.3056-	.2010	.1572-	.2010	.1572

	011	012	013	014	015	016	017	018	019	020
030	.1005	.1005-	.0000	.2041	.0402-	.1111	.1005-	.1048	.3015-	.1048
031	.1791	.0316-	.2059-	.0428	.3076	.0116	.4530-	.0989-	.0316-	.0989
032	.1919-	.0101	.2851	.1231	.0444-	.1452	.4141	.2423	.1919-	.2423-
033	.1919-	.0101	.2851	.1231	.0364	.1452	.3939-	.2423	.3939-	.0316-
034	.1005-	.3015	.2182-	.4083	.2010	.1111	.1005	.1048	.3015-	.5241-
035	.3898-	.2423	.2059	.1712	.0548-	.0116-	.3898-	.3187	.3898-	.0989-
036	.1535-	.0658	.1905	.1336	.1140-	.0970	.3728-	.2059	.3728-	.0229
037	.1919	.4141-	.0658-	.2872	.1979-	.0335-	.0101-	.2423-	.2121-	.1791-
038	.1919	.0101-	.2851-	.0821	.2868	.1898	.2121-	.0316-	.0101-	.0316
039	.3898	.4530-	.2059-	.0428	.0548	.2446	.2423-	.3187-	.3898	.1209-
040	.3282-	.4924	.1336-	.0417-	.0328-	.2948-	.0821	.1712-	.0821	.1712
041	.1923	.0891-	.3769-	.1524	.3208-	.1711	.1923	.5725-	.5676	.1810
042	.2148	.2375-	.4419-	.0230-	.1311-	.1000-	.2375-	.1533-	.0113-	.2005-
043	.1188-	.0274-	.0794-	.3155	.2814-	.0101	.3015-	.2764-	.0640	.1048-
044	.1791	.2423-	.0229	.0428	.1138-	.1048-	.3898	.3407	.2423-	.0989
045	.3939	.4141-	.2851-	.2872	.1979-	.0782	.0101-	.4530-	.1919	.1791-
046	.2872	.3282-	.0891	.1667	.1149-	.2722	.2872	.1712-	.0821	.2568-
047	.2423-	.1791	.2059-	.0428	.3666-	.1048-	.1791	.3187-	.1791	.3187
048	.0316-	.1791	.2059-	.2568	.1138-	.0116	.1791	.3407	.2423-	.1209-

VAR/VAR	021	022	023	024	025	026	027	028	029	030
001	.1336-	.1231	.0891	.0428	.2041-	.4583-	.3282	.5334-	.1021-	.4083
002	.1336	.1231-	.0891-	.0428-	.2041	.4583	.3282-	.5334	.1021	.4083-
003	.1336-	.1231	.0891	.0428	.0000	.1667	.0821-	.2872	.1531	.2041-
004	.2817	.2595-	.2817	.1353-	.0000	.1318	.1297-	.3892	.1614-	.2582-
005	.2516	.1791-	.0229	.3407	.1048	.2568	.1791-	.0316-	.4193-	.1048
006	.3118-	.2872	.1336	.2568-	.2041-	.1667-	.0821	.1231	.3572	.0000
007	.0658	.0101-	.2851	.0316	.1005	.1231	.0101-	.0101	.2010-	.3015
008	.0120	.1823	.1319	.0058	.0550-	.3590	.4806-	.0387	.0550	.0550-
009	.1905-	.2851	.2857	.0229	.0000	.0891	.1535-	.0658-	.2182	.0000
010	.1535	.0101	.0658-	.1791	.1005-	.1231-	.2121	.0101-	.0503-	.1005
011	.0658-	.0101	.5044-	.2423-	.5025-	.0821	.0101	.0101-	.2010	.1005
012	.0658-	.0101	.5922	.1791	.3015	.0821	.1919-	.2121-	.3015-	.1005-
013	.2857	.1535-	.2857	.0229	.0000	.1336-	.0658	.2851-	.0546-	.0000
014	.3118	.0821-	.0891	.1712-	.2041-	.3750	.4924-	.1231-	.1021-	.2041
015	.0263	.2787	.0614-	.1138-	.1206-	.1313	.2060-	.0364-	.2211	.0402-

	021	022	023	024	025	026	027	028	029	030
016	.0970-	.1452	.0970-	.1281	.3333-	.1814-	.0335	.0782	.3056-	.1111
017	.2851-	.2121	.1535	.6637-	.7035-	.0821	.1919-	.1919	.2010	.1005-
018	.0229	.0316	.4804	.1209	.1048-	.1712-	.0316	.6638-	.1572-	.1048
019	.2851-	.0101	.2851-	.0316-	.1005	.0821	.0101	.3939	.2010	.3015-
020	.0229-	.0316-	.2059	.3407-	.1048-	.2568-	.3898	.0316	.1572	.1048
021	1.0000	.3728-	.1905-	.0229	.0000	.0891	.0658	.0658-	.2182	.4364
022	.3728-	1.0000	.0658	.1791-	.1005-	.2872-	.1919	.4141	.3015	.3015
023	.1905-	.0658	1.0000	.2059-	.0000	.1336-	.0658	.0658-	.0546-	.2182-
024	.0229	.1791-	.2059-	1.0000	.3145	.0428	.0316	.2423-	.4193-	.1048
025	.0000	.1005-	.0000	.3145	1.0000	.0000	.1005	.1005	.0000	.2000-
026	.0891	.2872-	.1336-	.0428	.0000	1.0000	.9027-	.0821	.1021-	.2041-
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031	.2516	.0316	.2059-	.3407	.1048	.1712-	.2423	.0316-	.1048	.3145
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036	.4286	.2851-	.1905	.4346	.0000	.3118-	.3728	.1535-	.2182-	.2182
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045	.1535	.0101	.5044-	.1791	.1005-	.4924	.3939-	.1919	.0503-	.3015
046	.3118	.0821-	.1336-	.0428	.4083-	.0417-	.1231	.2872	.1531	.2041
047	.4346-	.2423	.4804	.3187-	.1048	.1712-	.0316	.3898	.1572-	.3145-
048	.0229	.1791-	.0229	.1209	.3145-	.0428	.1791-	.4530-	.4193-	.1048-

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003	.1712-	.3282	.0821-	.2041	.0428-	.0891-	.3282-	.0821	.0428	.0417-
004	.0000	.1297-	.2595	.1291	.1353	.2817	.1297	.0000	.1353-	.2635
005	.1209	.1791-	.2423	.1048	.0989	.4346	.1791	.0316-	.3187-	.4708
006	.2568-	.2872	.3282-	.0000	.1712-	.3564-	.2872-	.0821-	.1712	.3750-
007	.0316	.0101-	.2121-	.3015	.0316-	.1535	.3939-	.2121	.1791-	.3282
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010	.3898	.5960-	.4141	.3015-	.2423	.0658	.1919	.2121-	.1791	.0821
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012	.0316-	.0101	.0101	.3015	.2423	.0658	.4141-	.0101-	.4530-	.4924
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025	.1048	.1005-	.1005	.0000	.3145	.0000	.1005-	.1005	.1048	.0000
026	.1712-	.1231	.2872-	.4083	.4708-	.3118-	.0821	.2872	.1712-	.3750
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037	.0316-	.2121	.4141	.1005	.2423	.1535-	1.0000	.0101-	.1791	.3282-
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	031	032	033	034	035	036	037	038	039	040
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047	.0989-	.1791-	.0316	.1048-	.0989	.0229-	.0316-	.4530-	.3187-	.2568
048	.0989-	.2423	.2423	.3145	.3187	.2059	.1791	.0316-	.0989-	.0428

VAR/VAR	041	042	043	044	045	046	047	048
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	041	042	043	044	045	046	047	048
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028	.0985	.1018	.2467	.2423-	.1919	.2872	.3898	.4530-
029	.2100-	.0844	.1364-	.1048	.0503-	.1531	.1572-	.4193-
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038	.0985	.1018	.0640	.2423-	.0101-	.1231-	.4530-	.0316-
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Chapter
II-3-c

INDIVIDUAL INTERVIEW
Puerto Rican Intellectual (Tape F66)

F. To begin with Mr. C. I just have some questions of a brief nature like your age which I don't have.

C. Forty-five.

F. And where, where in Puerto Rico were you born.

C. Coamo, Puerto Rico. Coamo - a small town in the South.

F. I think I've heard of it before.

C. Near Ponce. Near Ponce.

F. And when did you come to the United States?

C. Well the first time I came here was in nineteen forty.

F. And then you returned? Is that it?

C. Yes, I lived here for almost eight years but first I was travelling but my residence was in New York.

F. Till '48.

C. More or less. Forty-seven or forty-eight.

F. And then you....

C. Then I went back to Puerto Rico and then I kept travelling. In other words I can say that I stayed a full year here - in Puerto Rico and New York. I was just travelling all the time. Latin countries.

F. And then when did you come now this time?

C. Now? Well I kept coming to New York but not living here and then I decided to come back and stay last year.

F. Just since last June?

C. Almost a year.

F. Well we have to celebrate your anniversary next month.

C. We will because I have my TV show and it will be the first anniversary of my show.

F. When will that be? Do you know when that will be?

C. Exactly the seventeenth. I mean I started my show the seventeenth so - of June '66. So we are close, very close to the anniversary.

F. Very close to your first anniversary. When did you learn English Mr. C.?

C. Well in Puerto Rico we had to - it was compulsory to learn or it is compulsory to learn English things - grammar. Third grade we start learning.

F. You began when you were about ten years old?

C. No I went to first grade when I was only four then I started six or seven years old. Started learning English.

F. But did you speak English outside of school when you were still at home?

C. In Puerto Rico?

F. Yeah.

C. Only in school.

F. So there was no friend outside of school or some place outside of school that you went to?

C. Well, when I went to school there were no friends with whom we could speak English.

F. So when did you begin speaking English outside of school?

C. When I came to New York. Still the first two years we kept the same customs, you know. Only when we needed. But then I joined an artistic group and I was one of the few Spanish speaking members of the group so I have to practice. I have to talk.

F. So that was in the forties?

C. Yes, it was in nineteen forty-two or forty-three.

F. Up until then you had used English only....

C. When needed.

F. But that was when you had friends, associates that you would talk to?

C. Well ah, at the time I used to, I used to live in Washington Heights. All my time I used to spend it in what we call "El Barrio."

You know, el barrio used to be - at that time - from one hundred and six up to one hundred and sixteenth. From Lenox to Lexington. That was our, what we used to call El Barrio Latino. Little Spain - that they used to call latina.

F. So you spent most of your time there?

C. There.

F. So you didn't need English there?

C. Not at all. Only when I used to come downtown to Broadway or any other place where there was no Spanish community I had to....

F. But then when you joined this group of actors, where they actors?

C. It was you know, Catherine Dunham. By that time she had Tropical Review - it was a very good show and I was signed by Mr. Sol Hurok specially for that show. I didn't know Mrs. Dunham or Miss Dunham and well all of a sudden I was part of that group and we travelled all over the states and I had to speak English. Only when I used to go out with my Puerto Rican friends - that was there too playing the drums and a few couple of Mexicans - then I practiced Spanish.

F. To keep it going, huh? You began to tell me before that you had only gone to school up to which grade?

C. I went to high school.

F. So you finished high school in Puerto Rico?

C. Uh, huh.

F. Oh excuse me.

C. You're not supposed to ask me that.

F. Right from high school did you begin doing the kind of work that you're doing now?

C. Well, really I wanted to study - to keep on studying and I wanted to become a lawyer but my family couldn't afford it so I had a brother in San Juan who worked in a bank - a half-brother and he suggested me to join the Army because I was looking for high school graduates. I was not too inclined to join the Army because I wanted to become a lawyer and my other weakness was singing so I went to a radio station but I had been there when I was a student in High School. You know, those High School programs. Then I went back to the place just as a I say in English spectator and the fellow who was in charge of the program recognized me and he asked me. Did you come from a program in a certain high school - yes, from Coamo - oh yes I remember you. Why don't you sing a song? So that's in the morning and the name of the program was Ofertas Matinales - in other words it was like a morning offering - something. I said sure. I sang and then he paid me a dollar. Then if you want to come tomorrow you'll be welcome. I went back so I kept going to the program and was making $6.00 every week and at that time $6.00 a week for a beginner was a lot of money because 1939 that was the year, a school teacher was making $30.00 a month so I had only high school and was making $24.00 at least - almost $30.00 - and since I couldn't follow my ambition of becoming a lawyer - going to the University I decided not to join the Army at that time. Still my brother wanted me to join the Army. When I got the telegram I just been show them to my brother and that's how I became a singer. After that one of the best-known Puerto Rican composers Rafael Hernández went to Puerto Rico and it sounds like one of those movie script - the singer became sick - he couldn't recover so he picked me as his next singer and that was the way I came to the .... States.

F. Do you ever think now of becoming a lawyer or doing some other work than you're doing?

C. Well I can say myself that I am a frustrated lawyer because I wanted to become a lawyer but I don't have the will to start studying now.

F. You don't think now you'll turn into something else?

C. No, I don't think I could do it. If you believe to something then it's too hard to start all over again.

F. But aren't you perfectly happy doing what you're doing or would you....

C. In our business you become old and then your career is over then you have to think of something else so my purpose now is to try as hard as possible now to become as independent as possible - financially speaking. So I won't become dependent on anybody else. And besides I have a large family.

F. Here in New York?

C. Yes they're with me. One of them is in Puerto Rico. He's finishing high school and thinking and he wants to become a lawyer too. Only I have tried hard to get him a college here so he - I think he'll have to stay there in Puerto Rico - in the University there and thanks God now I can afford to pay his way through college. I didn't have it.

F. Where will he go? In Río Piedras?

C. Yes.

F. In the University. Oh that's a lovely university.

C. Still I'd rather have him here.

F. Why is that?

C. Well one of the things is that I think he should - all the Puerto Ricans should according to my opinion - should be fluent in both languages and he stays in Puerto Rico - he will speak English because he learned it but he won't be practicing enough and unless you practice you never master a language. So I've been trying but I think he applied too late.

F. He likes it there?

C. Well you know I like it there too but....

F. He would rather remain there is what I meant.

C. I don't know it all depends on - I think he'd rather remain here, come here because besides we are here. He's very close to us but anyway his future is more important now so if he gets a University here - college here I think he will rather be here.

F. Is he applying here?

C. Yes, he applied to a few in November. Apparently it was too late, and he's not an A student. He is more or less a B.

F. A B is very good. A is better.

C. A is better.

F. And was he accepted there in Río Piedras.

C. Yes, he was accepted there.

F. Well, you'll have a lawyer in the family.

C. I hope so. Anything as long as he studies. I want him to study. In fact I'm very sorry that I couldn't. You have to study. It's the most important thing. No matter what university. I'm not very choosy about things - universities - study.

F. If you study hard it really isn't that important. The university isn't that important. You study by yourself all the time. Those are just the introductory questions about yourself and now the rest are about your own views. I wonder if you would think just about two days. Yesterday, yesterday was Tuesday and the day before yesterday was Monday. If you think back about those two days. Yesterday and the day before. To whom to whom, was there someone to whom you spoke Spanish yesterday or the day before.

C. Well actually we speak Spanish at home and most of my friends - the place I visit most of them speak Spanish. So it comes natural you know to speak Spanish.

F. Who was in your family here with you now?

C. My wife and my children. The one that is in Puerto Rico and one that is in Viet Nam. He's a paratrooper.

F. But you still have a child here with you?

C. Yes, I have at least four.

F. Four right here in New York and you and your wife? Do you always speak Spanish to your wife?

C. Yes. Sometimes you know just when we all of sudden we start talking English just to....

F. Oh that's interesting to me. When does that happen? Think of one time when that happens.

C. Sometimes when we want our children to get used to the English - they are studying now here grammar and another girl is in high school we try when we remember to do all the talking in English so that they get used to the....

F. So sometimes you talk English to your wife when the children are there?

C. Right.

F. How about when the children are not there?

C. Well, you see, when you come, when a Puerto Rican at least I'm talking about myself - when you come here we find that a lot of things we can express easier in Spanish so a lot of things are really easier in English. When we want to say that just besides work we find that sometimes it's easier.

F. Like what? What would be easier to talk to your wife about in English? Anything?

C. Well sometimes let's say for example we talk about a case in court and we find it easier to say Third Degree, Second Degree. We find more sense in saying First Degree Murder, Second Degree Murder in English than in Spanish.

F. So sometimes....

C. I mean it feels, we can say in Spanish the same thing but we found it more adequate.

F. Any other things. Court things that you talk to your wife in English about?

C. Well sometimes you know we are a change of pace, we can say romantic things in English. You don't require so many words. In Spanish it's a different language but it's mighty complicated and sometimes it sounds - the romantic Spanish. I mean what you say - love things in Spanish sometimes now a day becomes a little old fashioned. I don't know if you understand what I mean.

F. Well, I'm trying to. Sometimes you may say intimate things to your wife in English?

C. Yeah. They come out more natural. You see when you say in Spanish to a girl now a day "yo te amo" and you know what that means it sounds artificial now and it is very easy to say you know I love you and it comes natural. You know, "I love you." But in Spanish which is very romantic for poetry or songs talking is a different thing. It sounds more sincere in English to say "I love," you know "I love you," and we don't need to put anything else, but of course that's my opinion. It doesn't mean that all the Puerto Ricans feel that way about our language.

F. Tell me about some other people that you talk Spanish to - not in the family. Some other people.

C. Well, when I go to perform in a theater you know most of the people - the Spanish - the Puerto Rican people here - Cubans, Dominicans - they know me because I've been to their countries and since I'm not a teenager so the mature people from those countries they know me. So do the kids because they see me in TV and hear my records. They feel that by - that they are close to front - that front and they talk to me you know when I'm performing on the stage. They talk to me and I have to answer them in Spanish. They never talk to me in English. Though most of them sound with an American accent.

F. When they talk to you in Spanish?

C. Most of them because most of them are raised all here.

F. So they speak to you in Spanish?

C. Yeah, yeah, the teenagers, the teenagers - Puerto Rican teenagers. They talk to you, to me in Spanish and they sound in an American accent.

F. And what do you talk back to them?

C. Well I talk in Spanish. As I said before when they answer it's easier in English because I know something that they don't understand in Spanish because they are born here and their Spanish is very limited. So I have to be careful how I answer back. If it is a very simple remark I say it in Spanish. If it is complicated I try to put a little bit of Spanish and English and we joking we call it Spanglish.

F. Spanglish?

C. You know - Spanish-English. But we do that as a joke. As a joke.

F. Do you have any Puerto Rican friends here to whom you speak English usually?

C. Well yes I have friends that they are Puerto Ricans but if they were not born here - they were here when they were very young - performers most of them that for them it's very hard to express themselves freely in Spanish.

F. You usually speak English to them?

C. Most of the time I speak English to them with one or two words in Spanish, English I mean and one or two words in Spanish. Let's say here's an example - now Joe Cuba. Well he's one of the Puerto Ricans that they don't know the language. They speak very few Spanish. They understand everything but when they have to talk they make so many mistakes that they rather say everything in English so when I talk to him I make it easy for him.

F. What would they think if you spoke to them just in Spanish?

C. No, they will understand me but I might say things that they don't understand because you know Spanish is a very rich language and....

F. What kind of thing wouldn't they understand?

C. Well they are difficult words for them that you don't use every day that I'm used to them because I have travelled and those Latin countries they don't speak English at all so we really have to speak Spanish. So I can't now, all of a sudden I can't say a very specific word but well now I say this word - a specific word - in Spanish it would be una palabra específica. They might not know what the meaning of específica is. So I tell them the right word. Instead of saying specific I say right word or specific word.

F. I you were to talk just Spanish to them what would they think?

C. No they wouldn't be - as long as they are Puerto Ricans they know that my language - they expect me to think that they can understand, that they understand and speak Spanish so they won't be mad and they just very sincere in that. They should listen. You know the way they talk. You know man I was raised here, I was born here. I understand but not too much, you know. Take it easy with me. I'm Puerto Rican you know.... but actually they didn't learned Spanish in school. They learn Spanish with their mother and father.

F. Do you ever have the feeling that boy you're going to talk Spanish to them and that will prove they're Spanish?

C. No, I have never tried to - how you say - what's the word - to impose the language because for me....

F. Tell me about your children. Do you sometimes think to yourself: I'm going to talk English to them because that will improve their English?

C. Right.

F. Yes. You do think that?

C. Those are my children. I cannot try to impose on them anything because after all most of them are adults that maybe they become uncomfortable you know talking to me so I try to make them feel comfortable so I let them feel that I'm the one that makes the mistake in the language by trying to keep a conversation in English and not embarrass them.

F. Are there any other people, any other Puerto Ricans that you speak English to? Not the people at work that you meet but other people?

C. Well let me tell you there are a lot Puerto Ricans here that they don't speak Spanish all.

F. But you meet them sometimes?

C. Yes.

F. Who are they - where are they?

C. Well name exactly I can't.

F. Well explain a little bit to me so that I can understand.

C. Well, the Puerto Ricans especially the youngsters. They most of them, they don't, in fact they don't want most of them, they don't want to speak Spanish and....

F. You say they call out to you in Spanish when you're performing.

C. Well, I tell you most of the time but you see in the Puerto Rican community here when you see these things happen - these are the Puerto Ricans who moved from their original place - you know from the barrio latino they move away and then they later the rest of their lives among continentals - among Americans that only spoke, speak English so when they came back to be with us they just don't. Maybe the parents did the same thing. I tell you that there is a - the other day I met a lady, I can't recall, I don't remember the name that's been here for thirty years still she's not a - she's about forty-five and when she speaks Spanish it's awful.

F. She still understand?

C. Yeah, she understands but when she speaks.

F. These youngsters that you mentioned, they still understand?

C. Well most of them yes, but some of them they just can't follow a conversation.

F. Some don't even understand?

C. They don't understand.

F. This lady that's forty-five she still understands?

C. She understands - she understands everything but in Spanish she cannot carry a conversation and she came here when she was fifteen or sixteen. Old enough not to forget the language but she marry an American, lived among Americans and only spoke English - been speaking English for thirty years.

F. Some of these youngsters don't even understand?

C. Because they never learn.

F. And you say, you began to say they don't even want to understand? They don't want to?

C. Let me tell you there is a in New York - not now - but at the beginning when I cam here somehow some of them thought that it was a handicap to speak Spanish. They wanted to integrate orally with the American community and at the time, I mean you cannot blame them because at that time things were very rough for the Puerto Rican. Now they're rough but anyway there's an improvement.

F. But what has changed?

C. Well, there's been, I mean especially and most of all the Puerto Ricans born here or raised here - they have been fighting a lot for their own people to be accepted and to - well to be accepted. Not as a, not as an ethnic group but as a just a citizen and they've been fighting for all their rights. Before 99 per cent of the Puerto Ricans had a complex about being Puerto Rican here. Now I should say that complex is turning into pride. See now we know we're Puerto Ricans and we are as good as you and we have to be respected and you have seen the results. For example we have Badillo in the Bronx and most of them - all the Puerto Rican leaders at least you know we've been - we ask for something and maybe we don't get it but they listen.

F. And this makes them have a different attitude toward Spanish?

C. Well, because now they don't have to hide the fact that they are Puerto Ricans and now they can say we are proud of being Puerto Rican. I tell you when I came here in 1940, as I said before, I started working. Of course I came here not very - not in a good financial condition. I just came to see what I could do. All of a sudden I was doing good and I wanted to improve my living. I wanted to live in a better apartment. Not in a better community. Just a better apartment. I needed a place to live and since I was, since my community of Spanish Harlem was very close I tried to get an apartment - there was vacancy there and I called and everything was all right until they found that my last name was Rodríguez. You know my real name is Rodriguez. C. is my mother's name. So Rodríguez - well they thought I was Puerto Rican they didn't give me an apartment. I had the money to pay. It was a very good apartment. I had the money but then, "Oh, listen, you called too late." So I really got upset. That's when I decided to go back. Now, it is easier for us to get and those people who stay in what they call the ghettos, well they stay there because they are used to - they find another Puerto Rico there and as a matter of fact I don't think they should leave those ghettos. That's my opinion. I don't think so. In fact I think that we could have been better off if the people - the Puerto Ricans who better their conditions stay there and help the others. You see there is something that maybe it's instinctive. They were making $60 a week - all of a sudden they becom at $200 a week, maybe $500 a week, and they right away they look for another place. In fact they make the big mistake of moving and trying to - moving up and then trying to find a place. Before they move they find out if there are too many Puerto Ricans around. The same Puerto Ricans and that's a big mistake. I think that was the worst mistake the Puerto Ricans made. I think they should have stayed in Harlem they had before and try to improve that place. Lawyers should stay there, doctors should stay there because they would have helped to clean the bad things, you know. Because after all you know like any other group we have very good people. We have bad people too, but sometimes it's mostly ignorance than intention, you know; but most of our people when they improve their condition they move. They abandon their own people.

F. Do they do it today too?

C. Well, today, most of those people who are in good positions, who stay in the same community, the same place, most of them do it for political reasons, but at least they stay, you see. For example if I move to the Bronx and I am among 200,000 or half a million Puerto Ricans they all know, I think that most of them like me. Just think if I had become a lawyer as I wanted to before. I could have been a good bigman among them - staying there, living with them. Well I could have run for congress. So that's why these people stay there. Maybe they figure appointments inside - so stay they there, but if they go away from them they will never become anything. I mean that's my thinking. I think the worst mistake was that they abandoned their own people but now we are getting closer and I still critize the fact that whenever a Puerto Rican of better means than the other wants to look for an apartment, even among us, we talk and we say, "listen I got a nice apartment." Let's say in Queens. "You don't see any Puerto Ricans around there," and they are Puerto Ricans, the fellow that was talking. I get mad. I say, but why, aren't you Puerto Rican? "No, you know what I mean." Yes, I know what you mean. How do you expect people to think that the Puerto Ricans are good if you are running away from them because they are no good according to your opinions. When you say that you are blaming them. Don't you think so?

F. But this happens less now then it used to happen in the forties?

C. Yes, it happens less now but before yeah, before that's why.... all of a sudden the Bronx is our biggest community. They're used to be Harlem, on 116th, but then all of them who wanted to improve by leaving, they look for places in the Bronx. Well everyone - all of them moved to the Bronx - now they have the same trouble. Maybe now they want to come back to get away from the Bronx, from things and from all of those dangerous streets. But I think that if they stay there and try to improve what they have there, even with the risk of a lot of things,.they can improve their community. They can stay in there but the thing is not to ask for outside help. They have to help themselves first. We have to help ourselves first and then demand recognition. This is the way I see it. We shouldn't move - we should stay there.

F. Do you think that the fact that the more successful people don't move away too much now - does this help the youngsters now in some way to be more confident and more secure in being Puerto Rican.

C. Well, it is always good for a Puerto Rican family - for any minority group but specifically one family - to say I live next to Badillo. There musn't be anything wrong where I live because Badillo lives there or Nelson Zapata lives there or Antonio Méndez lives there.

F. They all live in Puerto Rican neighborhoods?

C. I'm just giving you an idea, an example. I don't know exactly. I don't know where they live but Badillo is borough president of the Bronx - he must live there. So I won't be embarrassed by saying - yes I live in the Bronx. I live next to Herman Badillo.

F. And you think this would help youngsters?

C. Of course. Because they can say - yes I live in Simpson - what number - any number - let's go, you know, to Doctor X, you know it helps you to, helps them to - with confidence you know.

F. Does it help them with Spanish too?

C. You mean?

F. Help them keep on in using and knowing and speaking Spanish more than they would otherwise?

C. Well yes - though I still think that they should study as much as possible the English. They should, they should speak both languages.

F. With each other?

C. With each other. We should be fluent in both languages. We should be and we need to be. Well the same thing I should say - the Americans should be, should be - Spanish should be compulsory. Because you see the trouble with maybe, the Latin countries - for example the Americans with the Latin countries - very few of the Americans know anything of Spanish and they go to a country and expect - demand the Latins to speak English.

F. About your own use of Spanish, if I could ask you a few questions Mr. C. are there some people with whom you try to speak your very best Spanish?

C. I do my best in my TV show to speak perfect Spanish because they should know that. Because when they, you listen to the Puerto Ricans here - when they talk through the radio and they make a lot of mistakes and of course the audience - especially the youngsters, think if he's in the radio and he's in the TV, he should be doing the right thing so they learn what they hear.

F. So when you're on your show?

C. I try to speak the best Spanish that I can manage.

F. Not the very simple Spanish that you mentioned before?

C. No, no, simple but correct.

F. I see.

C. Simple but you know the right word - the right way of pronouncing it. Not the Castilian - the Castilian is outmoded. You know we don't use thapatos. We say s for everything. But just the correct way. Because they make a lot of mistakes because they didn't study Spanish.

F. So what do you try not to say? What's the difference that you try to make?

C. I try not to say the slang because most of them think that the slang is correct because they don't know any better.

F. You know the slang? Do you?

C. Oh sure. And when I'm with friends I speak the slang but when I am talking to an audience I try to speak the best that I can. Simple but correct.

F. Do you do that with your friends too sometimes? Try to speak the most cultivated - the most correct....

C. No, no not cultivated - you see maybe you didn't get me. I mean for example the Puerto Rican - every place - every Latin country they have they're own way of speaking Spanish. Puerto Ricans, we try to, we don't pronounce - most of the time we don't pronounce the s. When I say jamás - that means never - we say jamá - jamá iré yo allí.

F. And you call this slang?

C. No, that's not slang. That's like the Southern here. We just eat the word but it's not a slang but there are other words that they are - I cannot explain to you what - it's like in English you have a lot of slang. Well in Spanish too but I try not to use it.

F. But when you say jamá on the radio - you say that on the TV?

C. In the radio I say jamás. For example the Puerto Ricans instead of permitir we say pelmitil. Instead of r we say an l.

F. Do you ever say pelmitil on the TV?

C. No, then I say "no debemos permitir" so they know what is the correct word.

F. But with your friend you will?

C. Well you see I don't because I've been travelling and I have been taught to speak correctly because when I went to Mexico first time I used to say pelmitil and that was pretty natural with us. Though we write it correctly we pronounce it differently but they started laughing - "Oh, pelmitil - Puerto Rico." So to avoid being mistaken I did my best to pronounce it correctly.

F. But when you're relaxed with your friends and with your family?

C. Well, when I'm relaxed I just don't think of that and maybe I say it with an l because it's part of my nature. By the way, most of us, and lately not so much - for the last thirty years that thing is being - but here in New York they still keep that because they were not educated there - the teenagers, so they still keep the way the old people used to talk in Puerto Rico. The Puerto Ricans in New York, I should say that they are better Puerto Ricans. They became, they are becoming better Puerto Ricans than in the Island.

F. Well, in what way?

C. Let me tell you - they have become in Puerto Rico - let's say cosmopolitan on account of the boom. They are thinking of just materialistic things. Here, in New York they fight more for the Puerto Ricans - for the Puerto Rican authenticity than in Puerto Rico. You see if anything happens to a Puerto Rican, in my field I'm talking about - in my artistic - well he was fired from this or he's no more of this - so what. That's the attitude in Puerto Rico. Here anything happens to a Puerto Rican, sometimes that fellow deserved what happened to him, but you see the whole Puerto Rican community--up in arms. Just because he's Puerto Rican, and sometimes that is a mistake, but it show that they care. They say, no matter what he did - he's Puerto Rican - we have to care for him.

F. You think they care more about better Spanish than they used to care?

C. You mean the language?

F. Yes.

C. I don't think so. No, they just care about the Puerto Rican ancestors. Not about the language. Not about the language.

F. I don't know how to refer to it. What should I call the kind of Spanish which is dropping the s sound and when you say pelmitil. What should I call that? Do you call that popular Spanish?

C. That's the way we talk in the, especially in the country and even the well educated Puerto Rican sometimes, they go to the politicians. They want to say a speech and all of a sudden they just relax and forget and they go into that.

F. Is it all right for me to call it popular Spanish? What should I call it when I talk to you?

C. No, it's not popular Spanish.

F. What should I call it?

C. It's ah, you do you say it in English - regionalismo.

F. I see. So it's a regional dialect.

C. It's not a dialect - it's just Spanish. It's like for example in Spain. The people from Andalucía - the Andaluces....

SIDE TWO

F. When you speak English you don't have two different varieties? As you do in Spanish?

C. No, the only one I have. The only thing when I make a mistake in a word - saying a word and somebody corrects me I don't make it anymore. Of course I have an accent no matter how I try.

F. Are there any people with whom you try to speak your very best English?

C. As I said before this is the only one I know.

F. There are no people with whom you try to use a very careful....

C. No, no. I just - when I came here at the beginning, in Puerto Rico we had at that time the Puerto Rican teaching English, they had the same trouble then that we have now. Now it's different there. Now the kids in Puerto Rico are doing better - less accent.

F. Do you know slangy English.

C. Not very much.

F. Do you wish you knew slangy English?

C. Well sometimes I need it. Sometimes I get, you know, they talk to me and I don't get the....

F. Who? Who talks to you?

C. Well some people that for example in show business - the show people use a lot of slang but for example, me, I have always talked in front of a Latin audience and getting with the Americans a mixed audience - Spanish and American - so most of the time I've been performing in South America and in New York for the Spanish audience so I'm not very well acquainted with the slang. By the time I learn, by the time I learn a word belonging to a slang, it is old fashioned.

F. I know what that is. My children tell me all the time. Tell me about your children. How is their Spanish? Your children's Spanish. The ones that are with you here now.

C. Well I should say that they speak very good Spanish. Actually they have improved a lot - the pronunciation - because we make fun of them you know just to let them know that they are wrong. Not scold them just ah come on - you sound like a jíbaro, you see. So you know the children always look for improvement.

F. When your children talk to you do they ever cut out the s's.

C. Sometimes and then I correct them.

F. You don't want them to talk that way?

C. Well I don't care if they talk that way as long as they know that it is wrong.

F. Do any of your children ever tell you "Oh, I don't want to talk Spanish? I don't like that"?

C. No, no. No, because now they don't speak fluent English yet. Only the girl. She's fifteen years old and she's very well in English and the other boy who is in Puerto Rico, because they have been studying in private school, so they you know, have good American teachers and they keep.

F. If your children continue to live here in New York do you think that they will lose their Spanish?

C. I don't think so. I want them to learn English. We take care of the Spanish.

F. You don't care that they mix now when they're small because at least they're learning English?

C. English, and then we will try to - anyway, we speak Spanish to we teach them.

F. You're not afraid that they won't want to speak Spanish when they're older?

C. At least I'm not afraid. Who knows what will happen. What will happen we don't know, but they must learn English because even in Puerto Rico if you don't know English you don't get anywhere. Even to be a policeman you have to speak English.

F. But why are you so confident about the other side. That they'll remember their Spanish? That they won't forget it?

C. Well you see, first there is a big community of Puerto Ricans here and then now going to Puerto Rico is just a matter of hours.

F. You and your family go back and forth?

C. Yeah we go back and forth and then....

F. During the year?

C. Yes.

F. I see. So each of your children have been to Puerto Rico a few times?

C. Yes.

F. And you think you will continue to do that?

C. Well I hope so.

F. And that will help them - their Spanish?

C. Yes.

F. So it won't be just at home?

C. And besides they will have to, for example, my girl who is in high school, she has Spanish as a signature (course). Well I'm not afraid of that one, but the smallest, we'll have to be careful with them, you know, but I'm not afraid. I don't think they will lose their Spanish.

F. How young are they?

C. Well one is....

F. The youngest?

C. The youngest is five. The other one is nine and ten.

F. And fifteen?

C. Fifteen.

F. Five, nine, ten and fifteen. So why don't you say "Oh, I better speak Spanish to them because the school will teach them English, the street will teach them English. I better teach them Spanish"?

C. Well, my plans are as soon as I know that they master - they can speak English fluently - then I start speaking Spanish and demand them to answer in Spanish, but now I have to let them get into the English.

F. But you still speak Spanish to them?

C. Yes. Sometimes, sometimes I mean, I speak English to them to see how they are, if they understand me.

F. You mostly speak Spanish to them?

C. Yeah, mostly. I mean that's our way of communication. But if they answer me in English - one or two words - I let them so that they can - because I want them to feel at ease with the English.

F. What do you think about these youngsters that don't know any Spanish anymore? The teenagers?

C. Well, as I tell you, I think it's a big mistake. They should learn Spanish because nowadays they forget - America is Spanish. So that's why I said before even the Americans should learn Spanish.

F. Do you ever try to do something to encourage these youngsters to learn Spanish better?

C. I haven't done that here.

F. Do you say anything on your program? Do you say anything that would show them that you think they should know Spanish?

C. No, because my show actually is not a - I mean it's a variety show.

F. So what you do is, you speak the best Spanish, so they will hear you speak that but you don't say anything at the show that they should know Spanish?

C. No, I don't say that. For example, I had a show at the Puerto Rico Theatre, variety show, and I was advertising it in my TV show and I used to say, "and now listen" - in Spanish - "look what we have in that show." In Spanish I would say "Bueno, y, recuerden que el día diez y nueve de abril comienza el show más fabuloso del año en el Teatro Puerto Rico. Al partir del diez y nueve de abril, por toda una semana, estará Joe Cuba, estará la Lupe, estará Felipe Purrela, estará un grupo de other performers," and then all of a sudden, I get a letter asking me why if I announce that Joe Cuba was going to be in my show they kept waiting for him. They thought that I was announcing Joe Cuba for my TV show and that comes to show you that they didn't understand Spanish because I never said that they were going to be in my show - TV show - but they only heard the name Joe Cuba and they didn't know - they didn't understand that I was not saying that he was going to be on my TV show.

F. What do you think we could do to make these children know Spanish better? What can be done for them, these youngsters that don't know it anymore? Can anything be done - do you think?

C. I don't know exactly; I cannot tell you. The language here is English. It has to be a family - parents - should be in charge of that. Take care of that, or maybe to be any foundation just to, to, to keep the language, but it is unfair in a country where the official language is English. That should be taken care all by the parents, not by any department of the city, because that's not, or by any people - any particulars. It should be....

F. Some organization, maybe some Puerto Rican organization should help out?

C. Well it could be, but it's a tough job. I think it's easier if just the father and mother take care of that. It can make it easier. Of course there'a a lot of publicity, but they say, well, you are in the United States and the language is English, but you should learn Spanish and it will be beneficial for your future - to know both languages. But when you teach them to be, or try to teach them to be good Americans, you cannot force them to learn Spanish, and to tell the truth Puerto Ricans, no matter what their regionalismo...How do you say it in English?

F. Regionalism.

C. Regionalism is - never it was American. I mean a very high percentage of the Puerto Ricans are maybe better Americans than the people who call themselves Americans. Well you can judge by the last, the Second War. Very few were drafted. Ninety-nine percent, maybe ninety-five percent, were volunteers. Actually you find the lack of....more in the Americans than among the Puerto Ricans.

F. I think you're right. Mr. C. do you read a Spanish newspaper? How often?

C. Every day.

F. Just one or both or....

C. Well I buy both but I buy the Daily News and the.... I buy all....

F. Four newspapers a day?

C. Well I used to buy five when the Journal was. Because I mean when I buy the Spanish newspaper we know everything about our community - whatever happened that you don't see in the American papers. That's the only reason why I buy them, because I buy the paper just to learn about the news and the opinion of certain people in relation to a few things, you know. But I buy the Spanish paper just to know the things about our community that you don't see in the American paper.

F. If you had all the time you wanted to read, is there anything you would particularly like to read?

C. Let me tell you, I like to read - it's just that somehow I lost my - sometimes I have so many things in mind - in my show - with my career that I cannot concentrate. I just - I start reading, I'm very interested and I have to cut. For example what takes you two days to read, it takes me a month. Once I start a book

I like to finish it, but it takes me too long because - it's a matter of assimilation - I can't assimilate as fast as I used to because I lost too much time just performing and not reading and just reading the papers. In fact that's what I did. But when I start a book I like it. It's just that it takes me too long. I have to learn again to read.

F. Do you read Spanish books or English books?

C. Both. I mean reading I understand both....

F. I'm sure you understand. I was just wondering what your habit is. Do you read a Spanish book for enjoyment or an English book?

C. No, I read both. I have to get into the habit of reading again and assimilating what I read.

F. How about to the Spanish radio do you listen to it?

C. No. I listen but not very often. I don't listen because I think what they've been doing. I mean this is a certain opinion. They are not improving anything. The Spanish radio here, they don't play the music that people really deserve and they have, you know, you have heard about the payjola -- payjola -- remember payjola.

F. Payjola -- to pay somebody?

C. To pay the disc jockeys, to put you know, put this record, put this record, you know and don't put that one. So before, when I started here, they accepted every record you sent them and then they put it and whatever the people asked they put it. Now it's another bad point. I have a record and if I pick three or four disc jockeys - I'm going to give you this amount - they keep plugging - it's like a jingle - a jingle gets popular because they have to put it because that's a jingle and they pay for the time. So you find that the jingle gets popular. People learn what they - when you keep - you know plugging and plugging they....So that's what happened with our radio. It has - well there has been a big investigation last month. People that they were making - these disc jockeys - they were making maybe $150 a week - all of a sudden they turn out with a big house in the outskirts - a couple of Cadillacs and things like that, so they start investigating. People complaining, small record companies that went broke because they had to pay too much to these people. I listen only - once in a while.

F. Do you listen to the Spanish TV?

C. Yes that's my, you know, I have to....

F. What the others are doing.

C. What the others are doing, but not to do the same thing because we are limited you know. Spanish TV is very limited when with the budget of one American show - one big American show - we can be on the air three years.

F. Do you belong to a Puerto Rican organizations or to....

C. What type of organizations?

F. I really want to know for your own relaxation - do you have some organization that you belong to or to some club?

C. You mean to entertaining club or entertainment?

F. When you yourself, when you have time to relax, how do you do it?

C. Well no, no, when I was there I used to send my children and wife to the Spanish Club in the Condado Beach Hotel. It's just an access to the beach and the pool and play tennis there but not a particular club.

F. Here? How do you relax here? What do you do when you have free time?

C. When I have free time I like to walk - that's my relaxation. Maybe I get into a movie and I go to these movies in Forty-second Street and have two movies for at night and then go to another. That's my relaxation.

F. Spanish movies?

C. Very seldom. Because Spanish movies are - most of them are Mexican movies and they always bring the same thing. The aqueros - the charros and kill. So I wait until I see a good movie - English or European and some Spanish movies.

F. Do you go dancing? Latin dancing?

C. I go to the Spanish clubs sometimes but most of the time I just watch. I dance once in a while. I'm supposed to be a good dancer but I don't like dancing. They think, I mean they say that I'm a good dancer. And I can say that I dance all right but I don't. I enjoy more dancing in a party than in a club, because they start playing, let's say bugaloo and the modern music. I know how to dance it but being an artist if I start doing it the right way they might think that I'm showing off. So I rather keep to the low music, I don't have to jump and pretend I'm, I have been, I'm being show-off. So I rather watch them and....

F. But you sometimes go to private parties of friends?

C. Friends - you know - and then we are relaxed, you know. We jump and we show off.

F. Are they mostly Puerto Rican friends?

C. No, mixed Puerto Rican and Americans.

F. Mostly artists?

C. Mostly artists.

F. Could I ask you some questions in Spanish?

C. Sure.

F. It's a little hard for me but I like to do it - I have to do it because as you say we have to learn Spanish. I'm really very serious about learning although it's not very good yet. Vd. se considera puertorriqueño?

C. Si.

F. Qué le hace a Vd. ser puertorriqueño?

C. Bueno, me hace ser puertorriqueño primero, que nací en Puerto Rico y mi idiosincrasia es de un puertorriqueño. La idiosincrasia quiere decir la forma en que yo reacciono entre todo es la de un puertorriqueño.

F. Hay un modo de pensar que es puertorriqueño? De sentir?

C. Si, nosotros somos más - no somos tan prácticos como el Sajón. Nosotros pensamos muchas veces más con el corazón que con la cabeza.

F. Eso quiere decir que mas sentimental ó....

C. Somos más sentimentales, más emocionales, más espiritualistas - mas espirituales que el prototipo de lo que nosotros creemos - del prototipo americano. Por eso es que muchas veces no nos entendemos. No entendemos las reacciones del próximo - el otro. El americano piensa que tal vez nosotros somos ruidosos - noisy, y nosotros pensamos, a veces que el americano es frío, y es que el americano realmente es más calculador y nosotros no somos calculadores. Nosotros expresamos en seguida. Hablamos hasta con las manos. Igual que el italiano que se excita. Nos excitamos.

F. Pero no es necesario tambien observar algunas cosas o hacer cosas para ser puertorriqueño? Es suficiente pensar de una manera distinta o hay que hacer cosas para....

C. Yo creo que para ser puertorriqueño lo que más se necesita es querer a Puerto Rico y desear lo mejor para Puerto Rico. Naturalmente si vamos a decir de nacimiento - pués nacer en Puerto Rico, pero muchos no han nacido en Puerto Rico y son muy buenos puertorriqueños. Claro. Es como muchos aquí en los Estados Unidos no son italianos - digo no han nacido en Italia - han nacido aquí y son muy buenos italianos. Cualquier cosa que ataquen al italiano, pues ellos sienten, y posiblemente ni hablan italiano y me imagino que lo mismo pasa con los judíos - que no nacieron todos en Israel. Sin embargo son buenos americanos pero cuando tocan el sentimiento judío son buenos judíos. Yo creo que uno debe ser, lo importante es ser humano - no exactamente ser puertorriqueño o ser italiano, o ser judío - lo que sea. Lo importante es saber respetar el sentimiento del próximo - del otro. Respetar al otro - respetar al próximo es la palabra - no importa de donde sea. Yo soy buen puertorriqueño porque quiero el bienestar para mi país y quiero tambien que el puertorriqueño aprenda a respetar la formas de otros individuos. Por eso exijo tambien que respeten nuestra forma de ser, que eso lo que quiere decir nuestra idiosincrasia. Nosotros somo mas ruidosos - we are noisy maybe than the other people, pero esa es nuestra forma, nuestra forma de ser.

F. Pero aquí en Nueva York vive un gran pueblo puertorriqueño - muchas personas, y son personas buenas, pero les cuesta trabajo - es difícil ser puertorriqueño aquí en Nueva York.

C. Bueno, eso depende también de la educación del individuo. Es también un poco fuerte exigirle a un puertorriqueño, de un ciudadano de ascendencia puertorriqueña, que no ha tenido contacto con el puertorriqueño, que su educación ha sido americana, que no ha vivido entre el puertorriqueño, que se sienta puertorriqueño si no sabe lo que es ser puertorriqueño. El sabe que tiene ascendencia puertorriqueña pero de hecho no sabe lo que es ser puertorriqueño.

F. Y se puede aprenderlo.

C. Bueno, eso tendría, eso sería como y dicen, un lavado de cerebro y educarlo - si, es que se necesita educarse para eso. A querer a su gente. Mucho puertorriqueño nacido aquí, que no ha tenido contacto con la comunidad puertorriqueña. Sí, dicen "mis padres eran puertorriqueños pero yo me crié en tal sitio y yo no conozco a Puerto Rico, no se," y hablan como americanos que nunca--- que Vd. va hacer con eso?

F. Y les molesta ser puertorriqueños?

C. Como dije, no es que nos moleste - ni es que le moleste personalmente, es que como se habido una falta de tacto. A traves de los años aquí en Estados Unidos, debido al muchos puertorriqueño que ha venido, y el la utlima imigración - como dicen la minoría mas reciente es la puertorriqueña--que cada vez que por ejemplo hay un crimen y si el que mató o si el criminal - el asesino es irlandez y el asesino es holandez - es de ascendencia irlandeza - o ascendencia europea pues siempre ponen el nombre. They never put Fulano es a German descent - they don't say that. They don't say Irish descent, they don't say Italian descent, they just print the name, but when they say Juan Gómez killed so and so - he's a Puerto Rican or Joe Brown Negro. That gives you a complex. Why they just don't put Gómez, the assassin. Because when they say Joe Boe they don't say German, or Irish, or Dutch. So at the beginning and besides you find ten crimes in the paper one day. One was committed by a Puerto Rican. The other nine were committed by other people and you only know that this one was a Puerto Rican. Because they put Puerto Rican. So that makes them feel like well....

F. Y a Vd. le parece que no hay un conflicto entre ser americano y ser puertorriqueño? O lo hay?

C. What type of conflict do you mean?

F. Un conflicto cultural.

C. Well, you know, there's always a cultural conflict.

F. You don't want to speak Spanish?

C. No, no. Siempre hay un conflicto cultural. I think sometimes that you are my son. Hay un conflicto cultural como son dos culturas disticta**s**.

F. Y no se puede combinar los dos?

C. Yo creo que la mejor muestra de que si se puede, son los puertorriqueños. El puertorriqueño acepta el americano. Es el americano que le da trabajo que tiene que aceptar el puertorriqueño. El problema no es nuestro. El problema es del americano.

F. Pues el americano no cree que es necesario ser tambien puertorriqueño pero puertorriqueños creen que es necesario ser a la misma vez puertorriqueño y americano.

C. Pero es lo mismo que....Como, como Vd. se considera?

F. Yo me considero judío americano.

C. Pues yo me considero puertorriqueno americano.

F. Si, pero para mi hay conflictos.

C. Pues el mismo conflicto de nosotros. El conflicto no es suyo. El conflicto, le crea el resto de la población americana - no es Vd. ni son los judíos. Vds. aceptan el pueblo americano.

F. Vaya decirle sobre un conflicto que yo tengo. Cada sábado, todo el mundo va a comprar y van al teátro y nosotros, los judíos, no podemos hacer ninguna cosa durante el sábado. Es un conflicto para mi y para mis niños.

C. Porqué, porqué?

F. Porque como judío tengo que estar en casa leyendo, estudiando y no comprar ninguna cosa durante el sábado.

C. Pero esa es su condición de judío. Pero nosotros tenemos y debemos de respetar eso, y el americano tiene que respetar eso - debe de respetar eso. Porque Vds. respetan - Vds. no protestan, ni tratan de cambiar al americano, diciéndole que el sábado deben de quedarse en su casa. El judío no le ha dicho a nadie que el sábado debe de quedarse en su casa. Está bien - Vd. se queda y yo no me quedo.

F. Y hay conflictos entre los puertorriqueños como estos tambien?

C. No, ese tipo de conflicto no; porque el puertorriqueño, no - digo - pero Vd. lo hacen por religión. Digo - el judío lo hace por religión. Nosotros no tenemos conflicto de la religión. En primer lugar el puertorriqueño que se llama católico romano, apostólico, se supone que no coma carne los viernes y yo le diría que noveinta y nueve por ciento come carne todos los días. El puertorriqueño cree en muchísimo - muchas imágenes. Santas, vírgenes y lo otro y además de Diós, pues tienen, pero sin embargo, ellos llenan la casa de santos - como el italiano tambien, pero no va los domingos a la iglesia casi. Es religioso mayormente en su casa, si reza mucho y van a la iglesia pero digo no es una, no es un hábito, no es como antes. Antes sí. Ahora sí - el puertorriqueño llega la Semana Santa y es cuando mas guardan ellos los principios.

F. Que clase de conflicto hay?

C. El conflicto que hay entre el puertorriqueño y el americano es cuestión de costumbres.

F. Por ejemplo.

C. Pues como dije antes - es cuestión de aceptación que el americano no aprende a aceptar a otra persona que no tenga las mismas costumbres de ellos o que no sea igual racialmente que ellos. Eso es todo el problema porque no es cuestión - no hay ningún conflicto - el conflicto lo crea el pueblo americano - no nosotros. Nosotros, si al venir aqui, pues el conflicto que surgiría es que debido a nuestro temperamento, pues somos quizás más - hablamos más debido a nuestro tempramento, pues somos quizas mas - hablamos mas alto y posiblemente a la mayoría del americano le gusta que hable bajito. Pero al americano no piensa que a nosotros también nos gusta que hablen alto y ellos hablan bajito. Es cuestión de quererse entender unos a otros. Eso es todo el - y entonces el otro problema del americano, aquí dentro, es aprender a respetar al próximo. Ellos predican una doctrina, pero dentro de la America, dentro de los Estados Unidos, no lo practican. Siempre les molesta lo que hace el otro, pero no quieren que al otro le moleste lo que ellos hacen. No aprenden a, a, como se dice, a tolerar. El americano no es tolerante.

F. Los puertorriqueños en la mayoría son mas tolerantes que los americanos?

C. Somos más tolerantes porque nunca hemos tenido en el mismo nivel el problema racial. Nosotros encontramos por ejemplo que un americano no quiera que su hija se case con un puertorriqueño. Está bien. Pero aceptamos que él no quiera que su hija se case con un puertorriqueño - digo poniendo de ejemplo el puertorriqueño, y a nosotros no nos importa que mi hija se case con un americano. Eso está mal de que ellos - ó está bien que él diga que no quiere que su hija se case con un puertorriqueño - esta bien, pero no se lo imponga a Vd. Don't impose it to anybody else. A lo mejor, aquel quiere que su hija se case con un puertorriqueño pero porque querer imponerlo que él siente a todo un pueblo. A lo mejor, hay un puertorriqueño que no quiere que su hija se case con un Americano. Pero que no me lo imponga a mi. Nosotros somos más individualistas. Nosotros queremos que mi hija se case con un buen hombre, no importa de donde venga - ni como venga. Nosotros no tenemos problemas de religión tampoco, porque el puertorriqueño ó la puertorriqueña, después que se case, no le importa si se case con un judío, si se casa con un protestante, si se case con un católico, aunque ella sea católica y el judío, ó ella católica ó el protestante, que se casen. Ellos alla se ponen de acuerdo para ver por cual de las dos religiones se case. En otras palabras, que nosotros, el puertorriqueño en el asunto de la religión es tolerante.

F. No es necesario ser católico para ser puertorriqueño?

C. No, no. Le pongo un ejemplo. En Puerto Rico hay una grán comunidad judía hoy en día. Si la mayoría del puertorriqueños supo que era judío porque pusieron una sinagoga y porque ellos decían allí nunca hubo una....

F. Y les consideran puertorriqueños tambien?

C. Bueno, no, porque son americanos, pero que ya viven en la comunidad puertorriqueña y se meten en las actividades social es de Puerto Rico como puertorriqueños, y a las fiestas de unos van los otros. Nunca hay problemas. Ahora los que sí se unen en sus grupos para su ceremonía religiosa son los que van a la sinagoga que tienen sus reuniones. Pero, por ejemplo, en las fiestas que dan ellos, por ejemplo para reunir, como es, Hadassah?

F. Si Hadassah.

C. Yo siempre era - the main speaker. No speaker, I mean performer. Quiere decir que allí nunca nosotros nunca hemos tenido ese problema. Lo malo es que ellos lo imponen. No matter si eres judío ó americano - lo impone. Por ejemplo en el mil novecientos treinta y nueve, cuando ya se suponía que Estados Unidos tarde o temprano tendría que entrar en la guerra contra Alemania, Japón, empezaron a llegar tropas americanas a Puerto Rico. Nosotros vivíamos siempre unos con otros juntos, pero llegaron en seguida - segregaron la playa. The beach - pusieron una fence - los americanos, y ahí fué que el puertorriqueño no pudo - pelea, y empezaron aparecer soldados muertos, porque ellos quisieron imponer eso que no existía. Ese es el problema. Es cuestión de comprensión y de tolerancia. Nosotros, pues tenemos que adaptarnos aquí, pues este es el país del americano. Pero nosotros no quisimos, nosotros no dijimos somos americanos. Da la casualidad que somos americanos, porque nos hicieron americanos. Entonces debemos recibir la tolerancia del americano y nosotros tener toeerancia así el americano y nosotros la tenemos. El puertorriqueño tienen tolerancia, es tolerante. Hay una frase en Puerto Rico que se llama que es la mas común - Ay Bendito! - What a pity! Para todo decimos "Ay bendito" - oh what a pity. Quiere decir que somos tolerante pero....

F. Entonces a Vd. le parece que es posible combinar lo americano y lo puertorriqueno aquí en Nueva York para los puertorriqueños?

C. Está sucediendo.

F. Y es posible ser puertorriqueño y quedarse puertorriqueño, más o menos, de una manera u otra, aquí en Nueva York, sin hablar español?

C. Bueno eso sería el mismo caso del italiano que si todo el mundo sabe que Sinatra es italiano y es americano. Se crió aquí pero es italiano sin oírlo nunca de hablar italiano. Es el mismo caso de todas las minorías. Es como el irlandes que es americano siendo irlandes y es irlandes sinedo americano.

F. Y van a ser buenos puertorriqueños sin hablar español y van a sentirse como puertorriqueños?

C. Bueno, eso es un sentimiento individual pero la mayoría, yo creo que sí, porque es que como estamos identificados en parte, yo diría que muchas veces el discrimen une más el puertorriqueño. El discrimen contra los puertorriqueños pues lo hace unirse más para defenderse. El puertorriqueño, lo que tiene es el instinto de protección, de defenderse, defenderse. Pero no es que sea - el puertorriqueño pudiera ser un buen puertorriqueño americano o un buen amerícano puertorriqueño si lo dejan.

F. Sin hablar español?

C. Sin hablar español.

F. Y sin comprenderlo?

C. Sin comprenderlo. Despues que lo dejen sentirse orgulloso de ser puertorriqueno.

F. Y no van a olvidar que son puertorriqueños?

C. Yo no creo. Yo no veo que....

F. Y los italianos no están olvidandose de que son italianos?

C. Tampoco lo creo. Bueno, yo diria que son malos italianos y buenos americanos, pero es que de la casualidad que la diferencia es que el italiano aquí es americano y allá es italiano, pero el puertorriqueño aquí es americano y el puertorriqueño es americano también. Somo ciudadanos americanos. Es una diferencia. Por eso es que yo digo que si puede lograrse - es como decir el tejano. Nosotros somos americanos en Puerto Rico y somos americanos aquí.

F. Hay alguna diferencia entre los puertorriqueños y los otros hispanos en Nueva York?

C. Bueno si. Hay una diferencia porque....

END

Chapter
II-4-a

BILINGUAL ATTITUDES AND BEHAVIORS*

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Students of attitudes and overt behavior have long been aware of the lack of complete correspondence between the two. To some extent this lack of correspondence or agreement is due to inherent differences between generalized tendencies toward behaviors and the specifics governing such behaviors *per se*. To the extent that such differences (rather than traditional differences in the ways researchers and respondents interpret attitude measurements[1]) do underlie observed discrepancies between attitudes and behaviors, Fendrich has recently suggested that "commitment measures" may improve the predictability of relevant behaviors since they are less "contaminated by role playing unrelated to overt behavior."[2]

Sociolinguistics too has evinced concern about the extent of agreement between attitudes or other self-reports and overt behaviors. Several investigators have pointed to the possibility that language

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[1] See Herbert H. Hyman, "Inconsistencies as a Problem of Attitude Measurement," *Journal of Social Issues*, 5 (1959), pp. 38-42; Kurt W. Back, Thomas C. Hood and Mary L. Brehm, "The Subject Role in Small Group Experiments," *Social Forces*, 43 (December 1964), pp. 181-187; and Aaron V. Cicourel, *Method and Measurement in Sociology* (New York: The Free Press of Glencoe, 1964), pp. 203-209.

[2] James M. Fendrich, "A Study of the Association among Verbal Attitudes, Commitment and Overt Behavior in Different Experimental Situations," *Social Forces*, 45 (March 1967), pp. 347-355.

census reports may differ from actual behaviors because of respondent attitudes concerning what language(s) they _should_ use (or are _expected_ to use) for speaking, reading or writing.[3] However, beyond the question of conscious or unconscious bias in language reporting there is also the question as to whether respondents are sufficiently aware of their language usage to be _able_ to report it validly. Ervin[4], Fishman[5] and Gumperz[6] each imply that such awareness rarely obtains for ideologically and intellectually unsophisticated persons and that even well educated subjects may be relatively unsuccessful in monitoring and reporting their usage. On the other hand Fishman has claimed that politicized and ideologized respondents are able to validly report those of their language behaviors that correspond to topics of current socio-political interest.

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[3] The validity of language census data is discussed in the following references, each of which contains an extensive bibliography of language census studies: Joshua A. Fishman, "Appendix A. Methodological Notes: U.S. Census Data on Mother Tongue," _Language Loyalty in the United States_ (The Hague: Mouton, 1966), pp. 419-422; Stanley Lieberson, "Language Questions in Censuses," _Sociological Inquiry_, 36 (1966), pp. 267-279; Stanley Lieberson, "How can We Measure and Describe the Incidence of Bilingualism," _The Description and Measurement of Bilingualism_, (ed.) W. Mackey (Ottawa: Canadian National Commission for Unesco, 1967; Preprints of the International Seminar held at the University of Moncton, June 6-14, 1967), pp. 145-159.

[4] Susan Ervin-Tripp, "An Issei learns English," _Journal of Social Issues_, 23 (1967, no. 2), pp. 78-90; also see her "An Analysis of the Interaction Between Language Topic and Speaker," _American Anthropologist_, 66 (1964, no. 2), pp. 86-102.

[5] Joshua A. Fishman, "Language Maintenance and Language Shift as Fields of Inquiry," _Linguistics_ (1964, no. 9), pp. 32-70; also Joshua A. Fishman, "Varieties of Ethnicity and Varieties of Language Consciousness," _Monograph Series on Languages and Linguistics_ (Georgetown Univ.), 18 (1965), pp. 69-79.

[6] Jan-Peter Blom and John J. Gumperz, "Some Social Determinants of Verbal Behavior," _The Ethnography of Communication: Directions in Sociolinguistics_, (eds.) Dell Hymes and John J. Gumperz (New York: Holt, Rinehart and Winston), in press.

The present study examines two different kinds of language usage and language attitude replies to a mail questionnaire distributed to a bilingual population. More specifically, this study seeks to determine whether commitment items show any greater relationship to pertinent language behavior criteria than do more traditional dispositional or role playing language use and language attitude items.

STUDY DESIGN

Sample

Our Ss consisted of 500 members of a Puerto Rican youth organization that conducts clubs at various public and Catholic high schools in the New York City area. Of the 500 to whom our questionnaires and prepaid return envelopes were sent replies were received from 375 or 75%.

Self Report Instrument

The 57 item yes-no questionnaire distributed to the Ss included questions concerning the desirability of social contacts with non-Puerto Ricans, attitudes toward being Puerto Rican, attitudes toward being American, observance of everyday Puerto Rican behaviors, observance of everyday American behaviors, range of interests, and use of Spanish and English. The 57 items were initially pretested and revised to eliminate ambiguity and to avoid unintentionally offensive wording. Seven background items (age, sex, birthplace, etc.) were listed before any of the attitude and behavior items, thus making for 64 items in all. The instrument was entitled "64 Questions" and was accompanied by a covering letter explaining the Project's interest in learning more about Puerto Rican high school students in the New York City area and requesting the recipient's cooperation, while pointing out that his/her anonymity could be fully preserved.[7]

Commitment Scale

A ten item commitment scale was appended to 80% of the questionnaires. The commitment scale was on top of the questionnaire in 50% of those cases in which it was included, and on the bottom of the questionnaire in the remaining cases. This scale was entitled "Would you agree to...? (What would you be willing to do?)" and consisted of the following items:

1. Would you agree to participate in a small-group discussion, with other youngsters of Puerto Rican origin in New York, on the topic of improving your command of Spanish language and Puerto Rican literature? __Yes__No
2. Would you agree to have as your roommate in college a youngster of Puerto Rican origin who preferred to speak in Spanish? __Yes__No
3. Would you agree to spend a weekend at the home of another youngster of Puerto Rican origin in New York who wanted to discuss with you how to improve your command of Spanish language and Puerto Rican literature? __Yes__No
4. Would you agree to invite another youngster of Puerto Rican origin to spend a weekend at your home in order to discuss with him (or her) how to improve your command of Spanish language and Puerto Rican literature? __Yes__No
5. Would you agree to join a club for youngsters of Puerto Rican origin in New York who are interested in improving their command of Spanish language and Puerto Rican literature? __Yes__No
6. Would you agree to attend a lecture or conference on the topic of how youngsters of Puerto Rican origin in New York can improve their command of Spanish language and Puerto Rican literature? __Yes__No
7. Would you agree to join a protest-meeting against New York youngsters of Puerto Rican origin who cease speaking and reading the Spanish language? __Yes__No

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[7] For a copy of the "64 Questions" instrument and a copy of the "Would You Agree to..." instrument consult Appendix B of J. A. Fishman, R. L. Cooper, Roxana Ma, et al., Bilingualism in the Barrio, Final Report to DHEW under Contract OEC-1-7-062817-0297 (New York: Yeshiva University), 1968.

8. Would you agree to attend a meeting of a local chapter (in your borough) of a Young Puerto Rican's Association for Strengthening the Use of Spanish in New York? __Yes__No

9. Would you, if asked, agree to contribute $1.00 to help finance the activities of a Young Puerto Rican's Association for Strengthening the Use of Spanish in New York? __Yes__No

10. If you have answered yes to any of the above please give your:

Name____

Address______________________________________

Telephone No.__________________________________

The commitment items were constructed so as to approximate a Gutman-type scale--i.e., so as to involve increasing intensity of commitment--although no actual dependence on scalability was required.

Follow-Up

All individuals who signed the commitment scale when replying to the mail questionnaire were subsequently sent an invitation to attend an evening of Puerto Rican songs, dances and recitations. The program was described as being of interest to all those who wished to strengthen the Spanish language and to further cultural creativity in Spanish among Puerto Rican youngsters in the New York City area. Recipients of the invitation were asked to send back a postage prepaid card indicating whether they would attend the program to which they were invited. Those who did attend were signed in. In this way it became possible to locate the questionnaire and commitment scores of those who attended the program.

Groups

The following groups of respondents were constituted on the basis of all of the instruments described above.

Group 1: Questionnaire alone available (no Commitment Scale sent). n = 47.

Group 2: Questionnaire returned: Commitment Scale returned unsigned, and therefore, no invitation sent. n = 53.

Group 3: Questionnaire returned; Commitment Scale returned and signed. Did not reply to invitation. n = 178.

Group 4: Questionnaire returned; Commitment Scale returned and signed. Replied "no" to invitation. n = 22.

Group 5: Questionnaire returned; Commitment Scale returned and signed. Replied "yes" to invitation but did not attend program. n = 49.

Group 6: Questionnaire returned; Commitment Scale returned and signed. Replied "yes" to invitation and did attend program. n = 26.

HYPOTHESES

The following hypotheses were tested by the data obtained:

Hypothesis 1: Commitment items are factorially separate from more traditional attitudinal and other self-report items dealing with language usage.

Hypothesis 2: Commitment Scores are more closely related to attendance at the Program than are more traditional attitude or other self-reported behavior scores derived from the "64 Questions" questionnaire.

Hypothesis 3: Whether the Commitment Scale is filled out at all or whether it is filled out before ("top") or after ("bottom") the "64 Questions" questionnaire influences neither the questionnaire replies nor the Commitment Scale replies obtained.

The above hypotheses were rationalized on the basis of the presumed greater relevance of commitments than of attitudes or other self reports to subsequent pertinent behavior. In view of this assumption it was predicted that Groups 2 to 6 would differ consistently and directly with respect to their commitment scores whereas they would not so differ with respect to their questionnaire scores. Finally, for commitment measurement to be a maximally useful approach to the prediction of behavior, it would be desirable for "top" and "bottom" groups not to differ markedly in commitment or in attitudinal position.

RESULTS

Test of Hypothesis 1

A verimax orthogonal solution of the intercorrelations between the 57 attitude and behavior items yielded eight factors which were defined as follows.[8]

Factor I: Diffuse, unideologized, linguistically unaware Puerto Rican preferences and behaviors.

Factor II: Maintaining and strengthening Spanish in self and community (C scale).

Factor III: Optimism, success-orientation, progress-orientation, "American dream" conviction.

Factor IV: Ties to Puerto Rican homeland, family and organizations, without linguistic awareness.

Factor V: Activism: manipulation, organization and influence on behalf of Puerto Rican "impact" in New York.

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[8] For a listing of the items in each factor and the primary factor loading of each item see Appendix 2, Chapter II-4-a of Bilingualism in the Barrio, J. A. Fishman et al., op. cit. For the intercorrelations between all 64 items (including the C scale items) utilized in this study see Appendix 3, Fishman, Cooper and Ma, op. cit.

Factor VI: Frequent use of Spanish in the common culture, mass media and everyday pursuits.

Factor VII: Withdrawal from everyday American contacts and activities.

Factor VIII: Puerto Rican authenticity, creativity, sensitivity, superiority.

Only Commitment Scale items were located on Factor II. Of the ten items involved in the initial Commitment Scale eight were found to have their primary loadings on Factor II, and two were found to have slightly higher primary loadings on other factors. Table 1 lists the items with primary loadings or substantial secondary loadings on Factor II and indicates that Hypothesis 1 is confirmed.

Test of Hypothesis 2

Analyses of variance were performed on each factor in order to test for the significance of the differences noted between the scores of the five groups that had filled out both the "64 items" questionnaire and the Commitment Scale. Between-group differences attained significance on three factors, as shown in Table 2. These differences were largest and most consistent in connection with Factor II.

Interestingly enough the two other factors (other than Factor II) on which between-group differences attained significance are Factor IV and Factor V, both of which share with the Commitment scale reference to action and, in particular, reference to organizational activity.

The means for groups 2 to 6 on Factor II were quite linearly related to the extent to which the groups approached participation in the program devoted to Puerto Rican songs, dances and literature.

TABLE 1. FACTOR II ITEMS AND THEIR FACTOR LOADINGS

Item	Loading	% Agreeing*
CS 6	.76	78%
CS 5	.75	77%
CS 1	.74	74%
CS 8	.68	66%
CS 3	.64	62%
CS 4	.60	63%
CS 9	.56	79%
CS 10	.44	84%
(CS 7)	(.33)**	(36%)
(CS 2)	(.31)**	(62%)

* = N for Factor II: 328

** = Secondary loadings. Item CS_7 obtained a primary loading of .38 on Factor V. Item CS_2 obtained a primary loading of .32 on Factor VI.

TABLE 2. BETWEEN-GROUP DIFFERENCES ON FACTOR SCORES

Factor I	F = 1.72, not significant
II	F = 31.22, significant at .01 level with 4/327 df
III	F = 2.11, not significant
IV	F = 3.42, significant at .01 level with 4/327 df
V	F = 3.97, significant at .01 level with 4/327 df
VI	F = 1.60, not significant
VII	F = 2.36, not significant
VIII	F = .70, not significant

viz: Group 2: 29.62; Group 3: 62.19; Group 4: 58.18; Group 5: 69.59; Group 6: 70.77. Note that Group 2, which did not even sign the Commitment Scale, received the lowest mean score on that scale. Group 4, which signed the Commitment Scale but replied "no" to the invitation to attend the Program, received a moderate mean score on the Commitment Scale.[9] Finally, Group 6, which signed the Commitment Scale, replied "yes" to the invitation to attend the Program and actually attended the program, received the highest mean score on the Commitment Scale. Hypothesis 2 is confirmed. A _t_ test reveals that except for the difference between the means of groups 3 and 4 and the difference between the means of groups 5 and 6 all other between-group differences are significant at the .05 level or better. The more conservative Newman-Keuls test (as modified for unequal n's by Kramer[10]) reveals group 2 to differ significantly from all other groups and group 4 to differ significantly from groups 5 and 6 at the .05 level or better.

Hypothesis 3

The absence or presence of the Commitment Scale produced no significant difference in scores on any of the other seven factors. Group 1 means do _not_ differ significantly from the means of all other

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[9] There is an unexpected reversal between the means of Group 3 and Group 4. Seemingly, those who went out of their way to reply "no" to the invitation to attend the Program were somewhat more opposed to commitment to Spanish than were those who did not reply to the invitation at all. The difference between the means of groups 3 and 4 is not significant.

[10] See Clyde Young Kramer, "Extension of Multiple Range Tests to Group Means with Unequal Numbers of Replications," _Biometrics_, 12 (1956), pp. 307-310.

*S*s who did fill out a Commitment Scale. Analyses of variance also indicate that the means of individuals whose Commitment Scales were on the "top" did not differ significantly from those of individuals whose Commitment Scales were on the "bottom" of their "64 Questions" questionnaires insofar as factors 1 and 3 to 8 were concerned. On the other hand, "top" and "bottom" respondents do differ significantly on Factor II (the Commitment Scale) itself ($F = 13.80$, 1/318 df), the former scoring higher than the latter in every group but Group 6. Thus, Hypothesis 3 is confirmed in large part but not completely. Commitment Scales scores *do* vary significantly depending on whether they are filled out before or after other questions.

Predictability of Factor Scores

Our data permits us to examine one additional question, namely the extent to which factor scores are significantly related to background characteristics such as birthplace (Puerto Rico *vs.* Continental USA) and sex, above and beyond their demonstrated relationship (or lack of same) to experimental group membership. As Tables 3a and 3b reveal both birthplace and sex are significant variables (or main effects) in conjunction with Factor II (note that $F_{R}2$ for birthplace = 7.1 and for sex = 7.7, both of which values are significant at the .01 level[11]) but have no such signifi-

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[11] Degrees of freedom are defined as follows in the analysis of variance via regression analysis:

$$\text{df for } F_{R}2 = \frac{\text{numerator}}{\text{denominator}} = \frac{K(=\underline{\text{number of predictors}})}{n - K - 1}$$

$$\text{df for } F_{\Delta R}2 = \frac{\text{numerator}}{\text{denominator}} = \frac{K_b(=\underline{\text{added}}\text{ number of predictors})}{n - K_a(=\underline{\text{prior}}\text{ total number of predictors }\underline{\text{before}}\text{ adding a new predictor}) - K_b - 1}$$

(continued)

TABLE 3a. ANALYSIS OF VARIANCE VIA REGRESSION ANALYSIS OF FACTOR II SCORES

Variables		r	Cum R	r^2	Cum R^2	ΔR^2	F_{R^2}	$F_{\Delta R^2}$
Group:	2 vs. 3 or 4 vs. 5 or 6	.502		.252			109.6**	
	2 vs. other	-.548		.300			136.4**	
	2 or 3 vs. other	-.257		.066			23.6**	
	5 or 6 vs. other	.259	.692	.067	.479	---	24.0**	
Birthplace		.147	.694	.022	.482	.003	7.1**	1.93
Sex		.155	.719	.024	.516	.034	7.7**	22.7(1)**

TABLE 3b. ANALYSIS OF VARIANCE VIA REGRESSION ANALYSIS OF FACTOR VI SCORES

Variables		r	Cum R	r^2	Cum R^2	ΔR^2	F_{R^2}	$F_{\Delta R^2}$
Group:	2 vs. 3 or 4 vs. 5 or 6	.119		.014			4.5*	
	2 vs. other	-.087		.008			2.6	
	2 or 3 vs. other	-.048		.002			.9	
	5 or 6 vs. other	.099	.197	.010	.039	---	3.2	
Birthplace		.074	.204	.005	.041	.002	1.6	.9
Sex		.077	.218	.006	.047	.006	1.9	2.0(1)

(1) Δ from total for Groups **significant at .01 level *significant at .05 level

cance in connection with Factor VI. The same Tables also reveal that while sex _is_ an incrementally significant predictor--above and beyond group membership--in conjunction with Factor II (note that $F_{\Delta R^2}$ for sex = 22.7, which value is significant at the .01 level) birthplace has no such incremental value. Neither birthplace nor sex have incremental predictive value for Factor VI[12].

DISCUSSION

The results of this study are in agreement with certain prior doubts as well as with certain prior certainties concerning the relationship between attitudes toward language behavior and such behavior per se. The prior doubts that language attitude and language usage self reports are predictive of language behavior are confirmed by the fact that our five experimental groups did _not_ differ significantly on Factor VI, the factor on which all traditional (noncommitment) attitude items were located. On the other hand, the prior certainties that verbal statements (self reports) concerning

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[11] (continued) For theoretical, computational and substantive presentations see R. A. Bottenberg and J. H. Ward, Jr., _Applied Multiple Linear Regression_, PRL-TDR-63-6 (Lackland, Texas: Lackland AF Base, 1963); Jack Cohen, "Some Statistical Issues in Psychological Research," _Handbook of Clinical Psychology_, (ed.) B. B. Wolmand (New York: McGraw-Hill, 1965), pp. 95-121; Jack Cohen, "Multiple Regression as a General Data-Analytic System," _Psychological Bulletin_, in press; Jack Cohen, "Prognostic Factors in Functional Psychosis: a Study in Multivariate Methodology," Mimeographed, Invited Address at the New York Academy of Sciences, March 18, 1968.

[12] Cumulative R values attained from the same six predictors on the remaining six factors are as follows: Factor I = .176; Factor III = .106; Factor IV = .354; Factor V = .375; Factor VII = .330; Factor VIII = .166.

certain types of language attitudes and usages are predictive of certain language behaviors were confirmed by the fact that our five experimental groups did differ significantly on Factor II, the factor on which all commitment-type attitude items were located. Thus, the validity of attitude and usage items pertaining to language behavior depends, at least in large part, on the criterion that is selected. If a criterion of overt behavior toward language is selected then commitment items hold out a promise of being quite differentiating and predictive. On the other hand, more traditional affective and role-playing items show a far more meager relationship to a criterion of overt behavior toward language. Such items are probably best validated against other criteria of a more "internal" nature rather than against external or overt behaviors.

The above findings may also have some implications for the fact that language-politicized and language-ideologized populations have long been thought to be able to report validly on certain aspects of their language behaviors. Such populations are not only more conscious and concerned with respect to their language usage but also more commited with respect to their behavior toward language. Whereas attitudes may not predict behavior toward language in the general population it is still quite possible that language behaviors, and attitudes toward language, are more significantly related in populations of high commitment. It does seem clearer from this study than it did prior to it that language attitudes and language commitments need to be separately examined in connection with language behaviors and behaviors toward language. It also seems likely that the relationships encountered between attitudes and behaviors are likely to be higher in some populations than in others due to moderator variables such as language commitment.

SUMMARY

Three hypotheses were advanced, and, in large part confirmed, in an effort to test the differential value of traditional attitude statements and more novel commitment statements in the prediction of a criterion behavior among bilingual Puerto Rican high school students in New York City. Commitment items were found to be factorially quite separate from attitudinal and other self-report items. They were also found to be appreciably more closely related to the criterion behavior (attendance at a Program of Puerto Rican songs, dances, recitations, etc.) than were attitudinal or other self-report items. Finally, they were found not to influence other self-report items, attitudinal or behavioral, although they themselves were influenced depending on whether they were answered before or after the other items.

The data obtained also tend to clarify the suspicion that certain populations can report their language behaviors validly whereas others cannot. It is suggested that commitment may be a moderator variable in this connection and that the relationship between self report and language behavior may be higher for subpopulations that are high in commitment than it is for the population as a whole.

APPENDIX: CHAPTER II-4-a

APPENDIX 1. OTHER FINDINGS

Q Groups

Five maximally different clusters of individuals were derived from a Q group analysis of the "64 Questions" and the "Would you agree to..." data.[13] Table 4 reveals the mean scores of the individuals located in each of the 5 Q groups on each of the 8 factors. The final column in the table reveals that the Q groups differ significantly at the .01 level on all Factors but Factor II. On Factor II the F ratio is equivalent to a probability such that $10\% > p > 5\%$.[14] Thus it is interesting to note that our "experimental groups" 2 to 6 differ significantly on Factor II, as they were designed to, but differ far less

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[13] Q group analysis is a form of factor analysis. While traditional R-type factor analysis recognizes behavioral (or response) patterns that cluster together and that differ maximally from other behavioral patterns, Q type factor analysis recognizes clusters of individuals that respond similarly and that differ maximally from other clusters of individuals. For some recent theoretical and empirical examples of Q-type factor analysis (not to be confused with Stephenson's Q sorting technique) see: Raymond B. Cattell, "The Data Box: Its Ordering of Total Resources in Terms of Possible Relational Systems," Handbook of Multivariate Experimental Psychology, (ed.) Raymond B. Cattell (Chicago: Rand McNally, 1966), pp. 67-128; Raymond B. Cattell, "The Three Basic Factor-Analytic Research Designs--Their Interrelations and Derivatives," Psychological Bulletin, 49 (1952), pp. 499-520; Raymond B. Cattell, Malcolm A. Coulter, and Bien Tsujioka, "The Taxonometric Recognition of Types and Functional Emergents," Handbook of Multivariate Experimental Psychology, (ed.) Raymond B. Cattell (Chicago: Rand McNally, 1966), pp. 288-329; Lee J. Cronbach, "Correlation Between Persons as a Research Tool," Psychotherapy: Theory and Research, (ed.) O. Hobart Mowrer (New York: Ronald Press, 1953), pp. 376-388.

[14] Compare the values on pp. 158 and 159 of E. S. Pearson and H. O. Hartley, Biometrika Tables for Statisticians, Vol. I. Cambridge, University Press, 1956.

TABLE 4. MEAN FACTOR SCORES OF Q GROUPS

Factor	Q_1	Q_2	Q_3	Q_4	Q_5	F
I	27.09	3.72	23.89	22.16	33.38	40.77**
II (CS)	61.76	50.00	60.44	63.24	58.03	2.28
III	51.39	45.25	37.78	28.92	50.58	32.20**
IV	66.51	71.19	85.18	90.27	77.55	11.72**
V	50.46	37.29	55.92	36.76	26.47	25.46**
VI	84.09	39.88	80.63	74.05	60.34	66.80**
VII	52.84	29.34	14.50	61.49	26.62	58.13**
VIII	17.44	- 2.05	15.11	8.92	8.80	12.44**
N	86	59	54	37	139	

** = Significant at the .01 level

markedly or not at all on the remaining factors whereas the Q groups, being behaviorally constituted and unrelated to the experimental groups, differ far more markedly on the other factors and far less on the Commitment Scale (Factor II).

Examined behaviorally the Q groups are contrastively characterizable as follows:

Q_1 individuals tend to score contrastively high on practically all factors. They may be said to reveal more positive response bias than those in other Q groups. Q_1 individuals are particularly high on "optimism...American dream orientation" (Factor III), "frequent use of Spanish in everyday life" (Factor VI), and on "Puerto Rican authenticity" (Factor VIII). Q_1 individuals obtain a contrastively low mean only on "ties to Puerto Rican homeland" (Factor IV).

Q_2 individuals have contrastively low means on practically all factors. They may be said to reveal more negative response bias than those in other Q groups. Their lowest scores are on "diffuse... linguistically unaware Puerto Rican preferences and behaviors" (Factor I), "maintaining and strengthening Spanish" (Factor II), "frequent use of Spanish in everyday life" (Factor VI), and on "Puerto Rican authenticity" (Factor VIII).

Q_3 individuals have a contrastively high mean on "activism, manipulation...on behalf of Puerto Rican impact" (Factor V) and, correspondingly, a contrastively low mean on "withdrawal from everyday American contacts" (Factor VII).

Q_4 individuals have contrastively high means on "maintaining and strengthening Spanish" (Factor II), "ties to Puerto Rican homeland..." (Factor IV), and "withdrawal from everyday American contacts"

(Factor VII), and, correspondingly, a contrastively low mean on "optimism...American dream orientation" (Factor III).

Q_5 individuals have a contrastively high mean on "diffuse... linguistically unaware Puerto Rican preferences and behaviors" (Factor I) and a contrastively low mean on "activism, manipulation... on behalf of Puerto Rican impact" (Factor V).

As Table 5 reveals, the Q groups also differ instructively in conjunction with the few demographic variables tapped by the "64 Questions" instrument. For example, Q_1 individuals who were most "acquiescing," in answering the questionnaire items, are also most likely to be female. Q_2 individuals who were most "rejecting" in answering the questionnaire items are less frequently female. Q_3 individuals who were most activistically oriented (Factor V) also have the lowest average age. Q_4 individuals who were highest on Factor II (Commitment Scale) are also highest with respect to both parents being Puerto Rican born. Q_5 individuals who were highest on "diffuse, unideologized, linguistically unaware Puerto Rican preferences and behaviors" (Factor I) also have highest proportion of American born individuals. Thus, all in all, the Q groups seem to differ in their response patterns as well as demographically in meaningful and consistent ways.

TABLE 5. DEMOGRAPHIC CHARACTERISTICS OF Q GROUPS

Demog. Characteristic	Q_1	Q_2	Q_3	Q_4	Q_5
Age (mean yrs.)	17.25	17.20	16.90	17.40	16.95
Females	72%	56%	69%	65%	70%
U.S. born	44%	63%	63%	49%	87%
Both parents PR born	80%	68%	81%	92%	83%
Father: White collar or professional	12%	24%	20%	12%	20%
Father: h.s. education or more	24%	40%	39%	16%	32%
N	86	59	54	37	139

APPENDIX 2. FACTORS, ITEMS AND FACTOR LOADINGS*

Factor I		Loading**
Item 29(21)	Most of good friends are Puerto Rican	.49
49(41)	Feels as much at home among Americans as among Puerto Ricans	-.45
23(15)	Does "Latin" dancing	.39
45(37)	Social affairs are of great interest	.37
51(42)	Writes poems, stories, songs in English	-.37
42(34)	Husband should have final word in family	.37
30(22)	Occupational success one of major interests	.35
47(39)	Is (or wants to be) a compadre to someone	.33
40(32)	Literature, art, music, drama are of prime interest	-.33

Factor II		
Item C6(60)	Would attend lecture on improving command of Spanish language and PR literature	.76
C5(59)	Would join club for improving command of Spanish language and PR literature	.75
C1(55)	Would join small group discussion on improving command of Span language and PR literature	.74
C8(62)	Would attend meeting of local Chapter of Association for Strengthening Spanish in New York	.68

C3(57)	Would spend weekend at home of another PR youngster to discuss how to improve command of Span language and PR literature	.64
C4(58)	Would invite another PR youngster for weekend to discuss how to improve command of Span language and PR literature	.60
C9(63)	Would contribute $1.00 to help finance Association for Strengthening Spanish in New York	.56
C10(64)	Gives name and address	.44
C7(61)	Would join protest against youngsters who cease speaking and reading Spanish	(.33)
C2(56)	Would agree to have PR roommate in college who prefers to speak Spanish	(.31)

Factor III

Item 8(01)	Family's life changed for better in past 5 years	.61
18(10)	Family's life changed for worse in past 5 years	-.55
24(16)	America is land of opportunity	.52
38(30)	Family will be better off 5 years from now	.47
60(51)	There are PRs who give too much emphasis to being PR	.38

44(36)	Many Americans are prejudiced towards PRs	-.37
27(19)	Being PR is different from being another kind of American	-.36
32(24)	Being PR is different from being another kind of Hispanic	.34
54(45)	Goes out on dates with PRs and non-PRs	.33
14(06)	Most American children obey parents just like PRs	.27

Factor IV

Item 22(14)	S or family visited PR in past 2 years	.49
19(11)	Belongs to an organization primarily for PRs	.46
57(48)	It is important for PRs in N.Y. to preserve customs and traditions	.42
34(26)	Had a visitor from PR in past 2 years	.35
13(05)	Often eats typical PR foods	.33

Factor V

Item 39(31)	Finding non-PR friends is a major interest	.40
62(52)	Tries to speak "better" English to some people	.39
25(17)	Organizational activity is of major interest	.35
56(47)	Tries to speak "better" Spanish to some people	.35
26(18)	Often uses Spanish to crack jokes	.29
20(12)	Politics is a major interest	(.31)

Factor VI

Item 53(44)	Likes to watch Spanish TV	.57
58(49)	Goes to Spanish movies or shows	.56
48(40)	Listens to Spanish radio programs	.55
43(35)	Reads Spanish publications from time to time	.52
52(43)	Usually speaks Spanish when becomes friendly with other PRs	.44
16(08)	Usually speaks both languages to friends own age	.40
59(50)	Would want own children to speak Spanish fluently	.33
55(46)	Has met Americans familiar with PR culture	.30
9(02)	Speaks Spanish as well (competently) as English	.29

Factor VII

Item 11(03)	Usually speaks English to father and other PR male adults	-.64
31(23)	Usually speaks English to mother and other PR female adults	-.62
41(33)	Usually speaks English to parents and grandparents when wants a favor	.57
63(53)	There are some PRs who act too American	.37
33(25)	In church usually attends Spanish services	.31
35(27)	Sports a major interest	-.21
17(09)	Prefers other to think of him/her as simply an American	(-.34)

Factor VIII

Item 21(13)	Often speaks Spanish to PRs who understand both languages	.50
36(28)	Usually speaks Spanish to PRs when emotional or upset	.43
37(29)	Enjoys "American" dancing	-.41
28(20)	Would be happier living in PR	.40
46(38)	Writes poems, stories, songs in Spanish	.40
15(07)	Religion is a major interest	.40
12(04)	Non-PRs visit S's home	-.36
64(54)	Most educated Americans are as cultured as educated PRs	-.30

** = Secondary Loading. Item C_7 had a primary loading of .38 on Factor 5; C_2 had a primary loading of .32 on Factor 6; 20 had a primary loading of -.32 on Factor 1; 17 had a primary loading of .35 on Factor 8.

* Items 10, 50 and 61 were dropped for the purposes of factor analysis since they were answered "yes" by almost everyone: [10] Education is one of major interests (94%); [50] S is interested in traveling to places never visited before (98%); [61] Wants own children to speak English fluently (95%).

Appendix 3:

TABLE OF CORRELATIONS

VAR.	1	2	3	4	5	6	7	8	9	10
1	1.0000	.0230-	.0643-	.0919-	.0230	.0482	.0096-	.0298-	.1089	.7136
2	.0230-	1.0000	.1179	.1004	.1119	.0463	.0820	.1941	.1383	.0318
3	.0643-	.1179	1.0000	.1000	.0973	.0326-	.0217	.1324	.1032	.1161-
4	.0919-	.1004	.1000	1.0000	.1076	.0664	.0095	.0114	.0495	.1314-
5	.0230	.1119	.0973	.1076	1.0000	.0151-	.1231	.1935	.1715	.0121
6	.0482	.0463	.0326-	.0664	.0151-	1.0000	.0078-	.0588-	.1877-	.0754
7	.0096-	.0820	.0217	.0095	.1231	.0078-	1.0000	.0830	.1075	.0321
8	.0298-	.1941	.1324	.0114	.1935	.0588-	.0830	1.0000	.0722	.0529
9	.1089	.1383	.1032	.0495	.1715	.1877-	.1075	.0722	1.0000	.0341
10	.7136	.0318	.1161-	.1314-	.0121	.0754	.0321	.0529	.0341	1.0000
11	.0472-	.0630-	.0312	.0256-	.0753	.1184-	.1868-	.0129-	.1178	.0217
12	.0218-	.0444-	.0309	.0848-	.0467	.0449	.0636	.0797-	.0833-	.0490-
13	.0276	.2243	.1849	.0963	.0901	.1153-	.1381	.1339	.2275	.0139
14	.0954	.0459	.0168	.0005	.1788	.1005-	.0588	.0112	.0370-	.0693
15	.0448	.0404	.0767-	.0467-	.0213	.0289-	.0110	.1463	.1036	.0312-
16	.2779	.0216	.0488-	.0268-	.0367-	.0310	.0402	.0010-	.0148	.0792
17	.1000	.0642-	.0992-	.0588-	.0109	.0115	.1032	.0045	.0524	.0054
18	.0483-	.0807	.0056-	.0023	.0782	.0154	.0315-	.1169	.0343	.0911-
19	.0892-	.0325-	.0569	.0831-	.0018	.0568-	.0924-	.0334-	.0092	.1310-
20	.0146	.1018	.0066	.0698	.0957	.0481-	.0665	.0957	.1327	.0407-
21	.0794	.0258	.0482	.1040	.1601	.0638-	.0668	.2428	.1953	.0773
22	.1097	.0725	.0485-	.0072	.0292	.0034	.0319	.0339-	.0075	.0140
23	.0077-	.0782	.5342	.0727	.0849	.0613	.0184-	.0479	.1309	.0657-
24	.0681	.0417	.0946-	.0931	.0545	.0966	.1002	.0286	.0206	.0615
25	.0371-	.0820	.1892	.0350-	.1627	.0147	.1028	.1337	.1149	.0622-
26	.1464	.0618	.1022	.0100-	.1558	.0142	.0183-	.0598	.1512	.1108
27	.0299-	.0235	.1283-	.0367-	.0098-	.1370	.0222	.0808	.0946-	.0173-
28	.1085-	.1385	.1097	.0930	.1225	.0789-	.1157	.1068	.1674	.0846-
29	.0279-	.0424-	.0326-	.0294-	.0068-	.0854	.0043	.0258-	.1693-	.0286-
30	.2608	.0278-	.0294-	.1306-	.0059-	.0508-	.1045	.0684	.0914	.2377
31	.0039	.0863-	.0578-	.0395-	.0187	.0696	.0556-	.1094-	.0930	.0337-
32	.0523	.0993	.0024	.0350-	.0145-	.0652-	.2362	.0726-	.0016	.0733

TABLE OF CORRELATIONS

VAR.	1	2	3	4	5	6	7	8	9	10
33	.0886	.1252	.2854	.0334	.0931	.0216	.0829	.1519	.1403	.0836
34	.0815	.0315	.0056	.0032	.0704-	.0210-	.0522	.0941	.0565	.0957
35	.0148-	.1575	.1305	.0405-	.1246	.0672-	.0805-	.1286	.0496	.0931-
36	.0866-	.0487-	.0469-	.0235	.0540	.1514-	.0381-	.0090	.0278	.0816-
37	.0422	.0630-	.0715-	.0826-	.0156	.0424	.0294-	.0631	.0186	.0538-
38	.0998	.0599	.0176	.0630	.0646	.0027-	.0529	.0375	.0057-	.0400
39	.0234-	.0162-	.0926-	.0979-	.0805	.1457-	.0115-	.2453	.1233	.0071
40	.0302	.1914	.0831	.0068-	.1414	.1546-	.0202	.2110	.2108	.0621
41	.0060-	.0151	.0654-	.1262-	.1232-	.1871	.0591-	.1320-	.1069-	.0605
42	.0396-	.0215	.0237	.1174-	.0082	.0118	.0834	.0063-	.0548-	.0117
43	.0563	.1922	.0004	.0248-	.1167	.1113-	.1628	.2008	.2433	.0240
44	.0538	.0069-	.0099-	.0931-	.1394	.0127-	.0760	.0996	.1139	.0535
45	.1640-	.0372	.0353-	.1532	.0444	.0504-	.0848	.0059	.0565	.1377-
46	.0241	.0379-	.0801-	.0603-	.0776	.0546	.1093	.0064	.0551-	.0183
47	.0189	.1546	.1171	.0639-	.0750	.0597-	.0799	.1413	.0582	.0162
48	.0026	.0446	.0175-	.0091	.0269	.0365-	.0319-	.0544-	.1769	.0000
49	.0235-	.1328	.1091	.0493-	.1498	.0854-	.0478	.2043	.1478	.0317-
50	.0840	.0910	.1156	.0457-	.1843	.0678-	.0451	.1234	.1595	.0209
51	.1674-	.0530	.0125	.1476	.1323	.0494-	.0318-	.0429	.1490	.1330-
52	.0198	.0328	.0080-	.0128	.0246	.0812	.0031	.0372	.0709-	.0145
53	.0374-	.0708	.0762	.0077-	.1717	.0320-	.1080	.0071	.2352	.0703-
54	.0301	.0553	.0130	.0804-	.0184-	.1550	.0698-	.0626-	.1048-	.0504
55	.0194-	.0571	.0223	.0002	.0040-	.0128	.0593-	.1147-	.0688-	.0099-
56	.0186-	.0113	.1466	.0620	.2072	.0023-	.0432	.1644	.1864	.0081-
57	.1097	.0215-	.0255-	.0916	.0593	.0374-	.0253	.0963	.0792	.0355
58	.1146	.0063-	.0060-	.0224-	.0302	.0405	.0466	.0925	.0062	.0412
59	.0593	.0924-	.0236-	.0128-	.0653	.0002-	.0658	.1568	.1081	.0180
60	.0413	.1156-	.0294-	.0168	.0189-	.0095-	.0538	.0484	.1174	.0318
61	.0215	.0878	.0221	.0350-	.0246	.0043-	.0548	.1817	.1355	.0326-
62	.1127	.0498-	.0802-	.0073-	.1967	.0412-	.0773	.2230	.1766	.0386
63	.0772	.0771-	.0542-	.0413-	.0674	.0086	.0504	.1997	.0224	.0486
64	.0163-	.0427-	.0766	.0177-	.0599	.0263-	.0060	.0635	.1312	.1012-

TABLE OF CORRELATIONS

VAR.	11	12	13	14	15	16	17	18	19	20
1	.0472-	.0218-	.0276	.0954	.0448	.2779	.1000	.0483-	.0892-	.0146
2	.0630-	.0444-	.2243	.0459	.0404	.0216	.0642-	.0807	.0325-	.1018
3	.0312	.0309	.1849	.0168	.0767-	.0488-	.0992-	.0056-	.0569	.0066
4	.0256-	.0848-	.0963	.0005	.0467-	.0268-	.0588-	.0023	.0831-	.0698
5	.0753	.0467	.0901	.1788	.0213	.0367-	.0109	.0782	.0018	.0957
6	.1184-	.0449	.1153-	.1005-	.0289-	.0310	.0115	.0154	.0568-	.0481-
7	.1868-	.0636	.1381	.0588	.0110	.0402	.1032	.0315-	.0924-	.0665
8	.0129-	.0797-	.1339	.0112	.1463	.0010-	.0045	.1169	.0334-	.0957
9	.1178	.0833-	.2275	.0370-	.1036	.0148	.0524	.0343	.0092	.1327
10	.0217	.0490-	.0139	.0693	.0312-	.0792	.0054	.0911-	.1310-	.0407-
11	1.0000	.1026	.0447-	.0705	.0455-	.1134-	.1551	.1115-	.1079	.0127
12	.1026	1.0000	.0464-	.0517	.0747-	.0560-	.1460	.0067-	.1154	.0059-
13	.0447-	.0464-	1.0000	.0225	.0959	.0012-	.0057-	.1128	.0328-	.2644
14	.0705	.0517	.0225	1.0000	.0248	.0184	.0221	.0996	.1001	.1758
15	.0455-	.0747-	.0959	.0248	1.0000	.1129	.0586	.1748	.0325-	.0891
16	.1134-	.0560-	.0012-	.0184	.1129	1.0000	.0512	.0471	.1153-	.0065-
17	.1551	.1460	.0057-	.0221	.0586	.0512	1.0000	.0455	.0202	.0348
18	.1115-	.0067-	.1128	.0996	.1748	.0471	.0455	1.0000	.1202	.0166
19	.1079	.1154	.0328-	.1001	.0325-	.1153-	.0202	.1202	1.0000	.0334
20	.0127	.0059-	.2644	.1758	.0891	.0065-	.0348	.0166	.0334	1.0000
21	.0057-	.0377-	.1476	.0545	.1663	.0171	.1301	.1733	.0838-	.2212
22	.0348	.0059	.0685	.0759-	.0420	.0755	.0242	.0397	.0796-	.0313-
23	.0643	.0414	.0986	.0726-	.0908-	.0174-	.0014-	.0460-	.0445	.0380
24	.0706-	.1614-	.1170	.0194-	.0348	.1472	.0597	.1115-	.4811-	.0209
25	.0052-	.0687	.1000	.0349	.0475-	.0101-	.0481	.0471	.0321	.1689
26	.0008-	.0792-	.0605	.3071	.0518	.0520	.0682-	.0252	.0332-	.0838
27	.0613	.0319	.0646-	.0872	.0266	.0595	.1103	.1531	.0325-	.1229-
28	.0707-	.0437	.3106	.1062	.0815	.0001-	.0394	.2937	.0509	.2631
29	.0309-	.0539	.1569-	.0223	.0444	.0206-	.0358	.0328-	.0301	.1933-
30	.0130	.0268	.0129-	.0972-	.0051	.2951	.0708	.1096-	.0936-	.0053-
31	.0291	.0442	.0603	.0155-	.0347-	.0976-	.1218-	.0200-	.0292-	.0076
32	.1187	.1706	.0087	.1008	.0111-	.0012-	.1417	.0887-	.0302	.0206-

TABLE OF CORRELATIONS

VAR.	11	12	13	14	15	16	17	18	19	20
33	.0618	.0107-	.1427	.0579-	.0066-	.0135	.0545-	.0351-	.0245	.0239
34	.0887-	.0764-	.0097-	.0422	.0440	.0308	.0152-	.0173-	.0304-	.0716-
35	.0010-	.0055-	.2527	.0480	.0312	.0482	.0438	.1645	.0224-	.1489
36	.0332	.0453	.0523	.0221	.0038	.1543-	.0225-	.0424	.1753	.0318
37	.0167	.0869-	.0436	.0470	.4080	.0592	.2811	.1233	.0244-	.1186
38	.0402-	.0077	.1545	.0526	.0543	.1053	.1106	.1761	.0294	.1122
39	.0444	.1311-	.0429	.0574	.1521	.0120	.1781	.0968	.0329-	.0591
40	.0256	.1241-	.3200	.0058	.2712	.0658	.0037	.1558	.0526-	.2060
41	.0107-	.0681	.1113-	.0251-	.0132-	.0652	.0719-	.2053-	.0604-	.1410-
42	.0180	.1777	.0215	.0972	.1398-	.0491-	.0377	.0689-	.0507	.0186-
43	.0507-	.0853-	.3860	.0059	.1770	.0452	.0013	.2666	.0227-	.2307
44	.1086-	.0859-	.1514	.0078	.1944	.0078	.0219	.1619	.0689-	.1169
45	.0465	.0244-	.0066	.0250	.1457-	.0880-	.0194-	.0568	.0056-	.0369
46	.0164-	.0070	.0366	.1229	.1307	.0087-	.0726	.0153	.1413-	.0650
47	.0479-	.0264	.1030	.1212	.0006-	.0665	.0011-	.0760	.0036-	.0548-
48	.1482	.0199-	.0451	.0042-	.0004-	.0059	.1350	.0971	.0394	.0351
49	.0248-	.0212	.1770	.0084	.2388	.0336	.0074	.1289	.0914-	.2257
50	.0098	.0264	.0945	.1511	.1397	.0292	.0065	.1216	.0643	.0040
51	.0772	.0083-	.0320-	.0012	.0440-	.1318-	.0344	.0361-	.0717	.0507
52	.0324	.0687	.0233-	.1239	.0446-	.0652	.1112	.0171	.0272	.0267
53	.0508-	.1056-	.0753	.0092-	.0566	.0881	.0240-	.0709	.0247-	.0619
54	.0400-	.0491-	.0292-	.0479-	.0460	.0535	.0272-	.0029-	.0320	.0804-
55	.1301-	.0678-	.0753-	.0565	.0392	.0401-	.2230-	.0952	.0133	.0235-
56	.0401	.0553-	.2481	.0468-	.0013-	.0520-	.0097-	.0972	.1195-	.0689
57	.0065-	.0561-	.0497	.0050	.0883	.0702	.1450	.0118	.0512-	.1036
58	.0366	.1384-	.0823	.0564	.0620	.0270	.0876	.0308	.0623-	.0869
59	.1199	.0410-	.0331	.0169-	.0426	.0339	.1765	.0444-	.0182-	.0467
60	.1734	.0484	.0476	.0369-	.0187	.0472	.2272	.1474-	.0632-	.0533
61	.0181-	.0801	.0940	.0060	.0184	.0226-	.1539	.0769	.0418	.1187
62	.1056	.0018-	.1919	.0338-	.0679	.0154-	.1722	.0395	.0015-	.0917
63	.0146	.0015-	.0620	.0039-	.0095	.0239-	.2079	.0650	.0320	.0508
64	.1301	.0898	.0149-	.0599	.0168-	.0882-	.2743	.0040	.0889	.0008-

TABLE OF CORRELATIONS

VAR.	21	22	23	24	25	26	27	28	29	30
1	.0794	.1097	.0077-	.0681	.0371-	.1464	.0299-	.1085-	.0279-	.2608
2	.0258	.0725	.0782	.0417	.0820	.0618	.0235	.1385	.0424-	.0278-
3	.0482	.0485-	.5342	.0946-	.1892	.1022	.1283-	.1097	.0326-	.0294-
4	.1040	.0072	.0727	.0931	.0350-	.0100-	.0367-	.0930	.0294-	.1306-
5	.1601	.0292	.0849	.0545	.1627	.1558	.0098-	.1225	.0068-	.0059-
6	.0638-	.0034	.0613	.0966	.0147	.0142	.1370	.0789-	.0854	.0508-
7	.0668	.0319	.0184-	.1002	.1028	.0183-	.0222	.1157	.0043	.1045
8	.2428	.0339-	.0479	.0286	.1337	.0598	.0808	.1068	.0258-	.0684
9	.1953	.0075	.1309	.0206	.1149	.1512	.0946-	.1674	.1693-	.0914
10	.0773	.0140	.0657-	.0615	.0622-	.1108	.0173-	.0846-	.0286-	.2377
11	.0057-	.0348	.0643	.0706-	.0052-	.0008-	.0613	.0707-	.0309-	.0130
12	.0377-	.0059	.0414	.1614-	.0687	.0792-	.0319	.0437	.0539	.0268
13	.1476	.0685	.0986	.1170	.1000	.0605	.0646-	.3106	.1569-	.0129-
14	.0545	.0759-	.0726-	.0194-	.0349	.3071	.0872	.1062	.0223	.0972-
15	.1663	.0420	.0908-	.0348	.0475-	.0518	.0266	.0815	.0444	.0051
16	.0171	.0755	.0174-	.1472	.0101-	.0520	.0595	.0001-	.0206-	.2951
17	.1301	.0242	.0014-	.0597	.0481	.0682-	.1103	.0394	.0358	.0708
18	.1733	.0397	.0460-	.1115-	.0471	.0252	.1531	.2937	.0328-	.1096-
19	.0838-	.0796-	.0445	.4811-	.0321	.0332-	.0325-	.0509	.0301	.0936-
20	.2212	.0313-	.0380	.0209	.1689	.0838	.1229-	.2631	.1933-	.0053-
21	1.0000	.0472	.1162	.0003-	.1072	.1876	.0147	.1702	.0802-	.0286
22	.0472	1.0000	.0073-	.0132	.0310-	.0278-	.0774	.0082-	.0850-	.0516-
23	.1162	.0073-	1.0000	.0422-	.2087	.1384	.0542	.0443	.0203	.0335
24	.0003-	.0132	.0422-	1.0000	.0537-	.0287	.0957	.0054-	.0232	.0858
25	.1072	.0310-	.2087	.0537-	1.0000	.0565	.0219-	.1471	.1281-	.1002
26	.1876	.0278-	.1384	.0287	.0565	1.0000	.0033-	.0643	.0409-	.0553
27	.0147	.0774	.0542	.0957	.0219-	.0033-	1.0000	.0492-	.0778	.0673-
28	.1702	.0082-	.0443	.0054-	.1471	.0643	.0492-	1.0000	.0766-	.0502-
29	.0802-	.0850-	.0203	.0232	.1281-	.0409-	.0778	.0766-	1.0000	.0527
30	.0286	.0516-	.0335	.0858	.1002	.0553	.0673-	.0502-	.0527	1.0000
31	.0539-	.0199-	.0103	.0056	.0594-	.0372	.0019-	.0046-	.0895-	.0812-
32	.0902-	.0114	.0314-	.0840-	.0279	.0151	.0370	.0200	.0694	.1245

TABLE OF CORRELATIONS

VAR.	21	22	23	24	25	26	27	28	29	30
33	.0088	.0291-	.3457	.0014-	.1338	.1081	.0736-	.1138	.0736	.0620
34	.0961	.1238	.0149-	.0892	.0069-	.0435	.0525	.0790-	.0634-	.0223
35	.0004-	.0353	.0770	.0512-	.1775	.1183	.1243-	.1692	.0132-	.0463
36	.0476-	.0569-	.0234	.1744-	.1001	.0285	.0040-	.0404	.1001-	.1261-
37	.1497	.0030-	.0651-	.0787	.0026-	.0213	.1130	.0094-	.0350	.0384
38	.1083	.0764-	.0064-	.0319-	.1122	.0343	.0389-	.1672	.1193-	.0211
39	.2594	.0248-	.0174	.0187-	.1321	.1817	.0559	.0788	.0338-	.0142-
40	.1786	.0185-	.1044	.0468	.0790	.1086	.0316-	.1398	.0408-	.0892
41	.2229-	.0582-	.0131	.0410-	.1071-	.0532	.0093-	.1535-	.1261	.0803
42	.0259-	.1199-	.0881-	.0033	.0967-	.0256	.0966-	.0168	.0080-	.0810-
43	.1943	.0384	.0540	.0221	.1553	.0362	.0511	.3245	.1675-	.0447
44	.1310	.0311-	.0537	.0732	.1988	.0823	.0071-	.0789	.0035-	.1056
45	.0485	.0493-	.1039-	.0065	.0179	.0921-	.0325	.0804	.1286-	.0977-
46	.0350-	.0229-	.0486-	.0708	.0633	.0968	.1640	.0136-	.0319-	.0201
47	.0156	.0320-	.1113	.0440-	.0637	.0471	.0922-	.1869	.0117	.0357
48	.0415	.0188	.0157	.0431	.0652-	.0376	.0145-	.1620	.0529	.0121-
49	.0712	.0580	.0615	.0708	.2065	.0663	.0055	.1822	.0294-	.0769
50	.0984	.0901	.0961	.0239	.0338	.2485	.0279	.0786	.0552	.0271
51	.0152	.0600-	.0526-	.0354-	.0969	.0062	.0232-	.0072-	.0296-	.0697-
52	.0445	.0560-	.0380	.0017	.0200	.0888	.0321	.0516	.0100-	.0235
53	.0322	.0733-	.0440	.1141	.1066	.0641	.0361-	.1625	.0464-	.0122-
54	.0445	.0390-	.0915	.0666-	.0641	.1238	.0099-	.1054	.0825	.0206-
55	.0633-	.0180	.0702-	.0504	.0053-	.0553-	.0589	.0110	.0054	.2136-
56	.1351	.0624-	.0682	.0730	.0515	.1635	.0264	.1593	.1079-	.0467
57	.1308	.0575-	.0070	.0288	.1173	.0005	.0200	.0017-	.0693-	.1695
58	.1007	.0002	.0224-	.0647	.0636	.0723	.0329	.0440	.0152-	.1746
59	.0785	.0258-	.0319-	.0261-	.1414	.0586	.0062-	.0015	.0419-	.1964
60	.0631	.1260-	.0432	.0376-	.0876	.0011-	.0112-	.0062-	.0307-	.2139
61	.0567	.0367-	.0626	.0043	.1200	.0133-	.0318	.1715	.0330-	.0793
62	.0658	.0266	.0153-	.0240-	.0917	.0916	.0239-	.0182	.0326-	.1602
63	.1263	.0420-	.0025-	.0178-	.1447	.0159	.0160	.0134	.0649-	.0849
64	.0971	.0927	.0636	.0842-	.0633	.0158	.0019-	.0223	.0869-	.0165-

TABLE OF CORRELATIONS

VAR.	31	32	33	34	35	36	37	38	39	40
1	.0039	.0523	.0886	.0815	.0148-	.0866-	.0422	.0998	.0234-	.0302
2	.0863-	.0993	.1252	.0315	.1575	.0487-	.0630-	.0599	.0162-	.1914
3	.0578-	.0024	.2854	.0056	.1305	.0469-	.0715-	.0176	.0926-	.0831
4	.0395-	.0350-	.0334	.0032	.0405-	.0235	.0826-	.0630	.0979-	.0068-
5	.0187	.0145-	.0931	.0704-	.1246	.0540	.0156	.0646	.0805	.1414
6	.0696	.0652-	.0216	.0210-	.0672-	.1514-	.0424	.0027-	.1457-	.1546-
7	.0556-	.2362	.0829	.0522	.0805	.0381-	.0294-	.0529	.0115-	.0202
8	.1094-	.0726-	.1519	.0941	.1286	.0090	.0631	.0375	.2453	.2110
9	.0930	.0016	.1403	.0565	.0496	.0278	.0186	.0057-	.1233	.2108
10	.0337-	.0733	.0836	.0957	.0931-	.0816-	.0538-	.0400	.0071	.0621
11	.0291	.1187	.0618	.0887-	.0010-	.0332	.0167	.0402-	.0444	.0256
12	.0442	.1706	.0107-	.0764-	.0055-	.0453	.0869-	.0077	.1311-	.1241-
13	.0603	.0087	.1427	.0097-	.2527	.0523	.0436	.1545	.0429	.3200
14	.0155-	.1008	.0579-	.0422	.0480	.0221	.0470	.0526	.0574	.0058
15	.0347-	.0111-	.0066-	.0440	.0312	.0038	.4080	.0543	.1521	.2712
16	.0976-	.0012-	.0135	.0308	.0482	.1543-	.0592	.1053	.0120	.0658
17	.1218-	.1417	.0545-	.0152-	.0438	.0225-	.2811	.1106	.1781	.0037
18	.0200-	.0887-	.0351-	.0173-	.1645	.0424	.1233	.1761	.0968	.1558
19	.0292-	.0302	.0245	.0304-	.0224-	.1753	.0244-	.0294	.0329-	.0526-
20	.0076	.0206-	.0239	.0716-	.1489	.0318	.1'86	.1122	.0591	.2060
21	.0539-	.0902-	.0088	.0961	.0004-	.0476-	.1497	.1083	.2594	.1786
22	.0199-	.0114	.0291-	.1238	.0353	.0569-	.0030-	.0764-	.0248-	.0185-
23	.0103	.0314-	.3457	.0149-	.0770	.0234	.0651-	.0064-	.0174	.1044
24	.0056	.0840-	.0014-	.0892	.0512-	.1744-	.0787	.0319-	.0187-	.0468
25	.0594-	.0279	.1338	.0069-	.1775	.1001	.0026-	.1122	.1321	.0790
26	.0372	.0151	.1081	.0435	.1183	.0285	.0213	.0343	.1817	.1086
27	.0019-	.0370	.0736-	.0525	.1243-	.0040-	.1130	.0389-	.0559	.0316-
28	.0046-	.0200	.1138	.0790-	.1692	.0404	.0094-	.1672	.0788	.1398
29	.0895-	.0694	.0736	.0634-	.0132-	.1001-	.0350	.1193-	.0338-	.0408-
30	.0812-	.1245	.0620	.0223	.0463	.1261-	.0384	.0211	.0142-	.0892
31	1.0000	.0575-	.0294-	.0085	.0430-	.0304	.0878-	.0458-	.1118-	.0244-
32	.0575-	1.0000	.0183-	.0439	.0831	.0303	.0885-	.0988	.0045-	.0046

TABLE OF CORRELATIONS

VAR.	31	32	33	34	35	36	37	38	39	40
33	.0294-	.0183	1.0000	.0391-	.1395	.0508-	.0794-	.0013	.0615	.0776
34	.0085	.0439	.0391-	1.0000	.0321	.0390-	.0029-	.0184	.1581	.0385-
35	.0430-	.0831	.1395	.0321	1.0000	.0440	.0064-	.1099	.1193	.2715
36	.0304	.0303	.0508-	.0390-	.0440	1.0000	.0114-	.1371	.0805	.0289
37	.0878-	.0885-	.0794-	.0029-	.0064-	.0114-	1.0000	.0118	.1322	.0852
38	.0458-	.0988	.0013	.0184	.1099	.1371	.0118	1.0000	.0437	.0530
39	.1118-	.0045-	.0615	.1581	.1193	.0805	.1322	.0437	1.0000	.0776
40	.0244-	.0046	.0776	.0385-	.2715	.0289	.0852	.0530	.0776	1.0000
41	.1134-	.1252	.0536	.1145-	.0589-	.0267-	.0655-	.0080-	.1227-	.1609-
42	.0716-	.2070	.0629-	.0752-	.0205	.0313	.0825-	.1370	.1324	.0108
43	.0652-	.0412	.1153	.0421	.2127	.0806	.0719	.1164	.1663	.3342
44	.0092-	.0584	.0487	.0025-	.3391	.0953	.0259	.0670	.1979	.3299
45	.0309	.0171	.0209-	.0155-	.0231-	.0516	.0537-	.0147-	.0167	.0198-
46	.0103-	.0810	.0236-	.0308	.0620	.0229	.0578	.0446	.0330	.0361
47	.1243-	.1224	.1837	.1036	.2709	.0213	.0014-	.0778	.0860	.1220
48	.0318-	.0407	.0064-	.1314-	.0777	.0464	.0245	.0546	.0466	.0417
49	.0480	.0829	.1329	.0538-	.2798	.1122	.1035	.0480	.1452	.3817
50	.0358	.0864	.1415	.0778	.2040	.0379-	.0264-	.0806-	.0965	.0625
51	.0067-	.0138-	.0093-	.1537-	.0050-	.0719	.0666-	.0503	.0004-	.0153-
52	.1041-	.0731	.0528-	.0514	.0010	.0101	.1037	.0326-	.0699	.0213-
53	.0450	.0186-	.1658	.0135	.0901	.0384	.0273-	.0169-	.0799	.1051
54	.0831	.0136-	.0612	.0362-	.0031-	.0100	.0927-	.1101-	.0285	.1000
55	.0609	.1638-	.0773-	.0585	.1088-	.0068-	.0215	.0812-	.0715-	.0116-
56	.1071	.0695	.1487	.0487	.1516	.1066	.0331-	.1548	.1948	.2082
57	.1266-	.0622	.0204	.0051-	.0471	.0161-	.1270	.0888	.0380	.1193
58	.1217-	.1017	.0330	.1170	.1626	.0348-	.1481	.0746	.1166	.0222
59	.0351-	.1164	.0255	.0189-	.1156	.0160	.0548	.0386	.0788	.0849
60	.0420-	.2167	.0353	.0363-	.0687	.0264	.0025	.0806	.0210	.0633
61	.0934-	.0527	.1179	.0200	.0866	.0720	.0212-	.1464	.0899	.1055
62	.0008-	.1276	.0141	.0205-	.1681	.1196	.0652	.1060	.1496	.1553
63	.0859-	.0553	.0498	.0127	.1155	.0448-	.0362	.0766	.1503	.0309
64	.0035	.0065	.0446-	.1195	.0593	.0502-	.0088	.0549	.0746	.0205-

TABLE OF CORRELATIONS

VAR.	41	42	43	44	45	46	47	48	49	50
1	.0060-	.0396-	.0563	.0538	.1640-	.0241	.0189	.0026	.0235-	.0840
2	.0151	.0215	.1922	.0069-	.0372	.0379-	.1546	.0446	.1328	.0910
3	.0654-	.0237	.0004	.0099-	.0353-	.0801-	.1171	.0175-	.1091	.1156
4	.1262-	.1174-	.0248-	.0931-	.1532	.0603-	.0639-	.0091	.0493-	.0457-
5	.1232-	.0082	.1167	.1394	.0444	.0776	.0750	.0269	.1498	.1843
6	.1871	.0118	.1113-	.0127-	.0504-	.0546	.0597-	.0365-	.0854-	.0678-
7	.0591-	.0834	.1628	.0760	.0848	.1093	.0799	.0319-	.0478	.0451
8	.1320-	.0063-	.2008	.0996	.0059	.0064	.1413	.0544-	.2043	.1234
9	.1069-	.0548-	.2433	.1139	.0565	.0551-	.0582	.1769	.1478	.1595
10	.0605	.0117	.0240	.0535	.1377-	.0183	.0162	.0000	.0317-	.0209
11	.0107-	.0180	.0507-	.1086-	.0465	.0164-	.0479-	.1482	.0248-	.0098
12	.0681	.1777	.0853-	.0859-	.0244-	.0070	.0264	.0199-	.0212	.0264
13	.1113-	.0215	.3860	.1514	.0066	.0366	.1030	.0451	.1770	.0945
14	.0251-	.0972	.0059	.0078	.0250	.1229	.1212	.0042-	.0084	.1511
15	.0132-	.1398-	.1770	.1944	.1457-	.1307	.0006-	.0004-	.2388	.1397
16	.0652	.0491-	.0452	.0078	.0880-	.0087-	.0665	.0059	.0336	.0292
17	.0719-	.0377	.0013	.0219	.0194-	.0726	.0011-	.1350	.0074	.0065
18	.2053-	.0689-	.2666	.1619	.0568	.0153	.0760	.0971	.1289	.1216
19	.0604-	.0507	.0227-	.0689-	.0056-	.1413-	.0036-	.0394	.0914-	.0643
20	.1410-	.0186-	.2307	.1169	.0369	.0650	.0548-	.0351	.2257	.0040
21	.2229-	.0259-	.1943	.1310	.0485	.0350-	.0156	.0415	.0712	.0984
22	.0582-	.1199-	.0384	.0311-	.0493-	.0229-	.0320-	.0188-	.0580	.0901
23	.0131	.0881-	.0540	.0537	.1039-	.0486-	.1113	.0157	.0615	.0961
24	.0410-	.0033	.0221	.0732	.0065	.0708	.0440-	.0431	.0708	.0239
25	.1071-	.0967-	.1553	.1988	.0179	.0633	.0637	.0652-	.2065	.0338
26	.0532	.0256	.0362	.0823	.0921-	.0968	.0471	.0376	.0663	.2485
27	.0093-	.0966-	.0511	.0071-	.0325	.1640	.0922-	.0145-	.0055	.0279
28	.1535-	.0168	.3245	.0789	.0804	.0136-	.1869	.1620	.1822	.0786
29	.1261	.0080-	.1675-	.0035-	.1286-	.0319-	.0117	.0529	.0294-	.0552
30	.0803	.0810-	.0447	.1056	.0977-	.0201	.0357	.0121-	.0769	.0271
31	.1134-	.0716-	.0652-	.0092-	.0309	.0103-	.1243-	.0318-	.0480	.0358
32	.1252	.2070	.0412	.0584	.0171	.0810	.1224	.0407	.0829	.0864

TABLE OF CORRELATIONS

VAR.	51	52	53	54	55	56	57	58	59	60
1	.1674-	.0198	.0374-	.0301	.0194-	.0186-	.1097	.1146	.0593	.0413
2	.0530	.0328	.0708	.0553	.0571	.0113	.0215-	.0063-	.0924-	.1156-
3	.0125	.0080-	.0762	.0130	.0223	.1466	.0255-	.0060-	.0236-	.0294-
4	.1476	.0128	.0077-	.0804-	.0002	.0620	.0916	.0224-	.0128-	.0168
5	.1323	.0246	.1717	.0184-	.0040-	.2072	.0593	.0302	.0653	.0189-
6	.0494-	.0812	.0320-	.1550	.0128	.0023-	.0374-	.0405	.0002-	.0095-
7	.0318-	.0031	.1080	.0698-	.0593-	.0432	.0253	.0466	.0658	.0538
8	.0429	.0372	.0071	.0626-	.1147-	.1644	.0963	.0925	.1568	.0484
9	.1490	.0709-	.2352	.1048-	.0688-	.1864	.0792	.0062	.1081	.1174
10	.1330-	.0145	.0703-	.0504	.0099-	.0081-	.0355	.0412	.0180	.0318
11	.0772	.0324	.0508-	.0400-	.1301-	.0401	.0065-	.0366	.1199	.1734
12	.0083-	.0687	.1056-	.0491-	.0678-	.0553-	.0561-	.1384-	.0410-	.0484
13	.0320-	.0233-	.0753	.0292-	.0753-	.2481	.0497	.0823	.0331	.0476
14	.0012	.1239	.0092-	.0479-	.0565	.0468-	.0050	.0564	.0169-	.0369-
15	.0440-	.0446-	.0566	.0460	.0392	.0013-	.0883	.0620	.0426	.0187
16	.1318-	.0652	.0881	.0535	.0401-	.0520-	.0702	.0270	.0339	.0472
17	.0344	.1112	.0240-	.0272-	.2230-	.0097-	.1450	.0876	.1765	.2272
18	.0361-	.0171	.0709	.0029-	.0952	.0972	.0118	.0308	.0444-	.1474-
19	.0717	.0272	.0247-	.0320	.0133	.1195-	.0512-	.0623-	.0182-	.0632-
20	.0507	.0267	.0619	.0804-	.0235-	.0689	.1036	.0869	.0467	.0533
21	.0152	.0445	.0322	.0445	.0633-	.1351	.1308	.1007	.0785	.0631
22	.0600-	.0560-	.0733-	.0390-	.0180	.0624-	.0575-	.0002	.0258-	.1260-
23	.0526-	.0380	.0440	.0915	.0702-	.0682	.0070	.0224-	.0319-	.0432
24	.0354-	.0017	.1141	.0666-	.0504	.0730	.0288	.0647	.0261-	.0376-
25	.0969	.0200	.1066	.0641	.0053-	.0515	.1173	.0636	.1414	.0876
26	.0062	.0888	.0641	.1238	.0553-	.1635	.0005	.0723	.0586	.0011-
27	.0232-	.0321	.0361-	.0099-	.0589	.0264	.0200	.0329	.0062-	.0112-
28	.0072-	.0516	.1625	.1054	.0110	.1593	.0017-	.0440	.0015	.0062-
29	.0296-	.0100-	.0464-	.0825	.0054	.1079-	.0693-	.0152-	.0419-	.0307-
30	.0697-	.0235	.0122-	.0206-	.2136-	.0467	.1695	.1746	.1964	.2139
31	.0067-	.1041-	.0450	.0831	.0609	.1071	.1266-	.1217-	.0351-	.0420-
32	.0138-	.0731	.0186-	.0136-	.1638-	.0695	.0622	.1017	.1164	.2167

TABLE OF CORRELATIONS

VAR.	41	42	43	44	45	46	47	48	49	50
33	.0536	.0629-	.1153	.0487	.0209-	.0236-	.1837	.0064-	.1329	.1415
34	.1145-	.0752-	.0421	.0025-	.0155-	.0308	.1036	.1314-	.0538-	.0778
35	.0589-	.0205	.2127	.3391	.0231-	.0620	.2709	.0777	.2798	.2040
36	.0267-	.0313	.0806	.0953	.0516	.0229	.0213	.0464	.1122	.0379-
37	.0655-	.0825-	.0719	.0259	.0537-	.0578	.0014-	.0245	.1035	.0264-
38	.0080-	.1370	.1164	.0670	.0147-	.0446	.0778	.0546	.0480	.0806-
39	.1227-	.1324	.1663	.1979	.0167	.0330	.0860	.0466	.1452	.0965
40	.1609-	.0108	.3342	.3299	.0198-	.0361	.1220	.0417	.3817	.0625
41	1.0000	.1358	.1720-	.0988-	.1802-	.0800	.0575	.0026-	.1497-	.0195-
42	.1358	1.0000	.0524	.0370-	.0277-	.0320	.0812	.0361	.0691-	.0106
43	.1720-	.0524	1.0000	.1845	.0026	.1154	.1667	.0928	.2367	.1225
44	.0988-	.0370-	.1845	1.0000	.0014-	.1033	.1804	.0949	.3762	.2409
45	.1802-	.0277-	.0026	.0014-	1.0000	.1367-	.1397-	.0035	.0310-	.1039-
46	.0800	.0320	.1154	.1033	.1367-	1.0000	.1340	.0716-	.0644	.0549
47	.0575	.0812	.1667	.1804	.1397-	.1340	1.0000	.0538	.0815	.1394
48	.0026-	.0361	.0928	.0949	.0035	.0716-	.0538	1.0000	.0373	.1696
49	.1497-	.0691-	.2367	.3762	.0310-	.0644	.0815	.0373	1.0000	.1353
50	.0195-	.0106	.1225	.2409	.1039-	.0549	.1394	.1696	.1353	1.0000
51	.1144-	.0449	.0002	.0341-	.1454	.1461-	.0506-	.0656	.0063	.0347-
52	.0132-	.1074	.0668	.0298	.0406-	.0610	.4824	.0182-	.0499-	.0039-
53	.0385-	.0346	.0781	.0775	.0057	.0310-	.0547	.0168	.0841	.1401
54	.0762	.1094-	.0022	.0385	.0842-	.0369	.1023	.0560	.0363-	.1122
55	.0741-	.1236-	.1053-	.1762-	.0323-	.1135-	.0689-	.1602-	.0427-	.1035-
56	.0300-	.0101	.1900	.2087	.0384	.1030	.1858	.1204	.2008	.1742
57	.0402-	.0459-	.0530	.1769	.0318-	.2192	.1046	.0254	.0756	.0110
58	.0736-	.0284-	.0563	.1548	.0190	.1013	.0310	.0636	.0801	.0164-
59	.0619-	.0638	.1359	.3251	.0263	.1688	.0842	.1069	.1450	.0223
60	.0476	.0963	.0669	.1967	.0293	.1500	.0527	.1172	.0477	.0042-
61	.0921-	.0366	.1857	.0938	.0082	.0212	.2246	.0770	.0825	.0131
62	.0610-	.0449	.1982	.2516	.0255-	.1306	.0531	.0507	.1654	.0646
63	.0554-	.0847	.1268	.1793	.0174-	.1244	.0574	.0607	.0848	.0500
64	.0964-	.0578	.0692	.0931	.0277-	.0777	.0753	.1101	.0953	.0611

TABLE OF CORRELATIONS

VAR.	51	52	53	54	55	56	57	58	59	60
33	.0093-	.0528-	.1658	.0612	.0773-	.1487	.0204	.0330	.0255	.0353
34	.1537-	.0514	.0135	.0362-	.0585	.0487	.0051-	.1170	.0189-	.0363-
35	.0050-	.0010	.0901	.0031-	.1088-	.1516	.0471	.1626	.1156	.0687
36	.0719	.0101	.0384	.0100	.0068-	.1066	.0161-	.0348-	.0160	.0264
37	.0666-	.1037	.0273-	.0927-	.0215	.0331-	.1270	.1481	.0548	.0025
38	.0503	.0326-	.0169-	.1101-	.0812-	.1548	.0888	.0746	.0386	.0806
39	.0004-	.0699	.0799	.0285	.0715-	.1948	.0380	.1166	.0788	.0210
40	.0153-	.0213-	.1051	.1000	.0116-	.2082	.1193	.0222	.0849	.0633
41	.1144-	.0132-	.0385-	.0762	.0741-	.0300-	.0402-	.0736-	.0619-	.0476
42	.0449	.1074	.0346	.1094-	.1236-	.0101	.0459-	.0284-	.0638	.0963
43	.0002	.0668	.0781	.0022	.1053-	.1900	.0530	.0563	.1359	.0669
44	.0341-	.0298	.0775	.0385	.1762-	.2087	.1769	.1548	.3251	.1967
45	.1454	.0406-	.0057	.0842-	.0323-	.0384	.0318-	.0190	.0263	.0293
46	.1461-	.0610	.0310-	.0369	.1135-	.1030	.2192	.1013	.1688	.1500
47	.0506-	.4824	.0547	.1023	.0689-	.1858	.1046	.0310	.0842	.0527
48	.0656	.0182-	.0168	.0560	.1602-	.1204	.0254	.0636	.1069	.1172
49	.0063	.0499-	.0841	.0363-	.0427-	.2008	.0756	.0801	.1450	.0477
50	.0347-	.0039-	.1401	.1122	.1035-	.1742	.0119	.0164-	.0223	.0042-
51	1.0000	.0295-	.0135-	.2098-	.0269-	.0386	.0672-	.0602	.1009	.1021
52	.0295-	1.0000	.0224	.0346	.0823-	.0787	.1026	.0312	.0995	.0685
53	.0135-	.0224	1.0000	.0316-	.0570	.0890	.0012-	.0674	.0441	.0240-
54	.2098-	.0346	.0316-	1.0000	.0704	.0442	.0071	.0353-	.0268-	.0642-
55	.0269-	.0823-	.0570	.0704	1.0000	.2672-	.4230-	.3589-	.5941-	.6892-
56	.0386	.0787	.0890	.0442	.2672-	1.0000	.2137	.2068	.2243	.1943
57	.0672-	.1026	.0012-	.0071	.4230-	.2137	1.0000	.5289	.4366	.4246
58	.0602	.0312	.0674	.0353-	.3589-	.2068	.5289	1.0000	.3720	.3580
59	.1009	.0995	.0441	.0268-	.5941-	.2243	.4366	.3720	1.0000	.6216
60	.1021	.0685	.0240-	.0642-	.6892-	.1943	.4246	.3580	.6216	1.0000
61	.0768	.1834	.0842	.0990-	.1986-	.2050	.1572	.0431	.2415	.1970
62	.0936	.0064-	.0784	.1253-	.5212-	.2880	.3422	.3766	.5014	.4362
63	.0421	.1244	.0412-	.1160-	.4066-	.1490	.2844	.2552	.4229	.3876
64	.0556	.1450	.0185-	.0955-	.3200-	.1231	.1462	.1476	.3202	.2979

TABLE OF CORRELATIONS

VAR.	61	62	63	64	VAR.	61	62	63	64
1	.0215	.1127	.0772	.0163-	33	.1179	.0141	.0498	.0446-
2	.0878	.0498-	.0771-	.0427-	34	.0200	.0205-	.0127	.1195
3	.0221	.0802-	.0542-	.0766	35	.0866	.1681	.1155	.0593
4	.0350-	.0073-	.0413-	.0177-	36	.0720	.1196	.0448-	.0502-
5	.0246	.1967	.0674	.0599	37	.0212-	.0652	.0362	.0088
6	.0043-	.0412-	.0086	.0263-	38	.1464	.1060	.0766	.0549
7	.0548	.0773	.0504	.0060	39	.0899	.1496	.1503	.0746
8	.1817	.2230	.1997	.0635	40	.1055	.1553	.0309	.0205-
9	.1355	.1766	.0224	.1312	41	.0921-	.0610-	.0554-	.0964-
10	.0326-	.0386	.0486	.1012-	42	.0366	.0449	.0847	.0578
11	.0181-	.1056	.0146	.1301	43	.1857	.1982	.1268	.0692
12	.0801	.0018-	.0015-	.0898	44	.0938	.2516	.1793	.0931
13	.0940	.1919	.0620	.0149-	45	.0082	.0255-	.0174-	.0277-
14	.0060	.0338-	.0039-	.0599	46	.0212	.1306	.1244	.0777
15	.0184	.0679	.0095	.0168-	47	.2246	.0531	.0574	.0753
16	.0226-	.0154-	.0239-	.0882-	48	.0770	.0507	.0607	.1101
17	.1539	.1722	.2079	.2743	49	.0825	.1654	.0848	.0953
18	.0769	.0395	.0650	.0040	50	.0131	.0646	.0500	.0611
19	.0418	.0015-	.0320	.0889	51	.0768	.0936	.0421	.0556
20	.1187	.0917	.0508	.0008-	52	.1834	.0064-	.1244	.1450
21	.0567	.0658	.1263	.0971	53	.0842	.0784	.0412-	.0185-
22	.0367-	.0266	.0420-	.0927	54	.0990-	.1253-	.1160-	.0955-
23	.0626	.0153-	.0025-	.0636	55	.1986-	.5212-	.4066-	.3200-
24	.0043	.0240-	.0178-	.0842-	56	.2050	.2880	.1490	.1231
25	.1200	.0917	.1447	.0633	57	.1572	.3422	.2844	.1462
26	.0133-	.0916	.0159	.0158	58	.0431	.3766	.2552	.1476
27	.0318	.0239-	.0160	.0019-	59	.2415	.5014	.4229	.3202
28	.1715	.0182	.0134	.0223	60	.1970	.4362	.3876	.2979
29	.0330-	.0326-	.0649-	.0869-	61	1.0000	.3585	.2211	.2065
30	.0793	.1602	.0849	.0165-	62	.3585	1.0000	.4760	.2594
31	.0934-	.0008-	.0859-	.0035	63	.2211	.4760	1.0000	.3084
32	.0527	.1276	.0553	.0065	64	.2065	.2594	.3084	1.0000

Chapter
II-4-b

GROUP INTERVIEW
High School Students (Tape F35)

F. I don't know whether you gather what I was on last time, just about the time it was over, and what I'd like to continue on today. I'm not clear as to when fellows like yourselves, boys and girls I better say now, speak Spanish and when you speak English. Just to make it more concrete, think of just yesterday and today just to take it down to something you can really remember--yesterday and today. Was there anyone yesterday or today that you spoke Spanish to?

C. Naturally.

F. Who was it?

C. Well yesterday, at home, I speak Spanish to everybody, my sister, my cousin, my mother. Like my sister might start speaking English and then I'll only answer her in Spanish and all the way she'll speak half in Spanish and half in English. I'll only speak Spanish to her, except when let's say, maybe I'm helping her with homework, or correcting something. Like I remember just this morning my cousin said something about something being more better, so I said something is not more better, something is better. Then I corrected her on that and like when they say something grammatically bad in English and I correct it, but besides that I speak Spanish all the time. Then, as I told you yesterday, I went to that so-called grand opening at that club and we spoke Spanish there. There was no English spoken.

F. Let me ask you to pause for a second. I get the impression, tell me if I'm wrong, that at home and with your family, except for rare occasions when you're correcting somebody's English, your policy is to speak Spanish.

C. Yes.

F. Now can I hear from each of you about this? So I can get a picture of whether this is typical or not typical.

C. I don't think it's typical, first of all.

F. Don't talk for the others. I'd like...

T. Well, when I speak to my aunt she can't speak English, so I speak to her in Spanish. Let's see, I spoke Spanish this morning when I left. When I was leaving I asked my mother's blessings. I said, "bendición." And I said, "me voy también," and that's Spanish.

F. Is it? What do you mean by that?

T. Well, I normally speak to my mother in English--my mother and father. When I'm playing around with my brother I speak in Spanish, just common words like pana, these are slang.

F. You normally speak English to your mother and father but you speak Spanish to your brother?

T. No, when I'm playing around with him. When we're playing around I use slang Spanish.

F. Is there a word for slang in Spanish? I was asking Ramón before. Is there a term for that? How do you say slang in Spanish?

R. I already forgot.

T. The closest would be rematao.

F. The picture I get from you is you normally speak English at home with everybody, except when you're playing with your brothers you may use Spanish words.

T. Yes.

F. Is that someone else's pattern? Different than either of these two?

R. Well, mine is different completely. I speak Spanish completely to my mother. I never speak to her in English unless a word slips out that I don't know in Spanish.

F. Why is that?

R. Cause, I don't know it in Spanish.

F. Why do you speak Spanish to her normally?

R. She'll understand me better. She won't understand me if I speak English and then as to my father, I'll speak mostly English, sometimes in Spanish. Then to my sister most of the time I speak English, so there's hardly any Spanish spoken there. Only on occasions.

F. That is different, in George's family it sounds like he talks Spanish to everybody, so everybody's alike in that respect. In Tom's family it sounds like he speaks English to almost everybody.

T. Yes. But there are times when I feel like speaking to them in Spanish. No reason. I just feel like speaking to them in Spanish. I haven't spoken it for a couple of days so I will speak to them in Spanish.

F. You don't see any pattern to that?

T. Well, yes, when I haven't spoken it in a couple of days I will speak to them in Spanish.

F. When you get thirsty for Spanish?

T. Right, right.

F. Any particular topic, or when you're in a particular mood?

T. Well, for instance when we're watching these Spanish shows I speak to them in Spanish and these come on every Monday and Thursday. When we're watching these shows I speak to them in Spanish.

F. But everybody in your family you could speak either English to or Spanish?

T. Yes.

F. But you normally talk English including your mother.

T. Yes.

F. And therefore Ramón's picture is different; he speaks English to his sister, mostly English or Spanish to his father but Spanish to his mother. What about your mother, does she speak English?

R. Well, she speaks it, but she'll only speak it once in a while.

F. Does she work?

R. Yes.

F. Does she speak English at work?

R. No. Occasionally. Actually if she's in the mood she speaks English to you but she doesn't know it that well to keep on talking to you in English. She'll have to refer back to Spanish most of the time. She feels more at ease.

F. That's one thing but do you feel she actually knows English well enough to use it, but she feels more at home?

R. Well, she went to school for a while to learn English but she had to stop doing that and I was small so she stopped and she really doesn't know it that well. She knows a few expressions and things like that but not to the extent of holding a conversation with someone.

F. But in the street if she asked...

R. Oh, she could speak to someone. She won't know what they're talking about but it'll be so chopped up in English. They'll be able to understand it, but it's a little awkward.

F. How come your father knows it better than your mother?

R. Well, because he's always been working, so once you start working in New York you have to learn English there's no doubt about it. Then he attended school for some time and he learned English there and I would speak English to him all I want and he'll understand me.

F. Why do you speak Spanish to him sometimes?

R. He wants me to. He wants me to. I tell him something in English and he says to tell it to him in Spanish.

F. What does he say?

R. Que me hable en español. You know he wants to hear me speak Spanish.

F. Does he do that to your sister too?

R. My sister speaks to him in Spanish so there's no problem there.

F. Oh yes, you told me. Mike could you tell me a little of how it works in your family. Is it like any of these three?

M. Yeah. It's something like Tommy's. My mother and my father they speak perfect English and my father knows about twenty words in Spanish and my mother knows Spanish quite well. But in the house I hardly ever speak Spanish unless it's to my grandfather and he's a Spaniard. He's always correcting me. I hate that.

F. What does he correct?

M. Everything.

F. What for example?

M. Like I might say I'm going to "trabajar," I'm going to work.

F. You say I'm going to "trabajar" and he says?

M. Tu va a trabajar. In Spanish he'll translate for me. He'll try and help me with my Spanish.

F. Will he say: tu vas a trabajar. "tu vas"?

M. Well he'll repeat what I said, not in the present or past. And like if I go to my grandmother's, she's another Spaniard, and she would want me to speak to her in Spanish but she speaks English also. But my grandfather, like for instance, everytime I come from school I stop off where my grandfather works and like I'll have 10 to 15 minutes of speaking to him in Spanish, but other than that I hardly ever speak in Spanish.

F. Do you think you got most of your Spanish from your grandparents rather than your parents?

M. Yes. Well up until I was 10 years old my grandmother used to take care of me a lot. My mother used to work so she would take care of me that's where I learned most of my Spanish. Then after I got into my mother's hands she destroyed it. I don't know as much Spanish as I did before.

F. Even though you say she speaks well.

M. But she doesn't speak it to me. And you just forget Spanish if you don't practice it and also like Tommy I get an urge to speak Spanish once in a while.

F. What's this urge like? I don't understand the urge.

T. We just naturally come out speaking Spanish. Your mother might be home cooking something and you'll just go and if you have something to tell her or ask something you'll just naturally talk in Spanish. I guess that would be the urge. But let me clear just one thing up. My parents do speak Spanish at home all the time. Spanish is the first language. When I speak to them in English if they don't reply in English they'll always reply in Spanish so that they are always speaking Spanish to each other. I speak to them in English and my mother well she went to high school here and she'll answer back in English but she normally speaks Spanish.

F. To?

T. To my brothers, to my father, her friends, my sisters.

F. Your mother went to high school?

T. Yes. She didn't graduate. She went something like to 6th term I believe.

F. But she knows English well.

T. Yes.

F. But she prefers to speak Spanish at home?

T. She does speak Spanish at home.

F. Almost exclusively?

T. Yes.

M. There was an instance yesterday where my Spanish saved me from a fate worse than death.

F. Yesterday?

M. Yes. I work in Alexander's and I'm a shoe salesman and yesterday was my first day selling shoes so I wasn't that fast in getting the shoes. So this Spanish couple about 19, 18, 20, they asked me to get these 4 pairs of shoes and since I don't know myself that well around there it took me a little while. When I got back they started talking in Spanish, you know, about me. This dirt is no good, taking his time about it, making me wait so much time.

F. What did they say?

M. I don't actually remember. Before they actually said anything real bad I came out. I said something in Spanish. I said, "Pues aquí están los zapatos". They said, "Oh, ho". Their attitude changed because they knew that I knew what they were saying. They said, "Oh another one that knows how to speak Spanish". And when I put on a suit and tie I don't look Spanish at all; in fact most of the time I don't look Spanish and most of the people in Alexander's in the shoe selling business are Spanish. And I think one or two more. One looks Spanish and the other one doesn't and me I don't look it at all. So they don't expect you to be Spanish and if you are Spanish they expect you to speak Spanish. So like they'll tell you off in Spanish without you knowing about it. They'll smile, you dirty no good; and stuff like that you know.

F. I gather that your two homes are different instead of being the same because Tom's parents would be speaking Spanish to each other and maybe even to the children whereas Tom may speak more frequently English to his parents than his parents will to him. Is that correct?

T. Yes, that's correct.

F. And you don't have grandparents that you talk to in English?

T. Yes, I have a grandmother, all she speaks is Spanish. I rarely even see her so.

F. So there's a difference. Each one is caught with a different kind of pattern. Liz, is yours anything like these?

L. In my house my mother and father speak to each other in Spanish all the time. I speak to my father in Spanish all the time cause his English is atrocious, and he is lost speaking it and understanding it. My mother she can speak English a little bit better cause she works and in order to communicate with her fellow workers she has to use it. But I usually speak to her in English or I talk to her in Spanish. My problem is that sometimes I start in Spanish and I'll end in English or vice versa. And that's because like him I won't know a certain word and I'll hesitate and so on and so forth; and by the time I finish what I have to say the whole meaning of it is lost somewhere in the air. And that's one reason why there's a great lack of communication.

F. But nevertheless to your father you primarily speak Spanish?

L. Yes.

F. And to your mother?

L. Spanish and English.

F. And Ramón I had almost forgotten you don't primarily speak Spanish at home?

R. No. Mostly I speak English cause I don't speak to my mother as often as I do to my father because I have to refer to him for let's say comments and things like that while I don't discuss this much with my mother. Well, he'll discuss it with her later on; but I find more difficulty in discussing it with my mother cause I feel he knows more about that than she does. So when I have to speak to her I speak to her in Spanish, she'll usually understand me.

F. You normally speak Spanish to your mother?

R. I'll always speak Spanish to my mother.

F. Always to your mother? And to your father?

R. Primarily English.

F. With Luz it's the other way around. With Mike it's almost always English to both of his parents. To George it's almost always Spanish to both of your parents. For Tom it's English primarily to both of your parents. Is there any one of your parents you'd more likely speak Spanish to? You said your mother.

T. Well, no, I guess I'd speak to them just about as frequent; I speak to them frequently and I guess I use English with my father just as much as I do with my mother. However, my mother does speak better English. My father had very little formal education here. So, he speaks good Spanish. He's fluent, he can speak it fluently. But my mother can speak it much better. She's had quite a bit of formal education in the U.S. But as far as speaking Spanish more to one than the other it doesn't exist.

F. You don't think you speak it more to your father because his English is less proficient than your mother's?

T. No.

F. And George you're the only one who speaks Spanish to both parents as a rule. What do you think, what is that?

C. Well, my mother wants it this way because she wants my sister to pick up the Spanish. I don't speak Spanish because I feel my sister, well I figure this way that my sister will eventually learn English in school, she'll pick it up in the streets. She'll have an advantage if she knows the Spanish. That's why I do it.

F. But do your parents know enough English that you could speak English, and it is just a preference in the family to speak Spanish? Is that the point?

C. Yes.

F. How much English do your parents know? They know it well?

C. Well, yeah, they know enough to get through. But like I said they prefer Spanish at home and that's what we speak.

F. Did they go to school in New York?

C. No.

F. But you feel there's a point of view, a preference for Spanish.

C. Yes, because I asked my mother well maybe if I start speaking English to you, you'll pick it up. She said no because the whole idea is so my sister would pick it up. That's why we speak Spanish.

F. What would happen if you spoke English to your parents? Did you ever speak English tothem? Can you think of a time?

C. No. I can't.

F. You came in and you said something.

C. Well, when I was smaller when I started going to school I might say a few expressions in English but that's about it. Can't remember any time when I only spoke English to them.

M. But do your parents know how to speak English?

C. Enough to get through.

M. Did you ever think of it this way, of trying to educate them?

C. Yes. But then my mother said no, because the whole purpose is you could learn your Spanish.

M. Well, my grandfather is 79, and though I speak Spanish to him once in a while I say now wait a minute now let's try and speak English for a while; see if you can answer me in English.

F. What did he say?

M. He says OK means all right. And he'll speak a...

F. Does he do OK?

M. Oh yes. Well, he owns a garage and all kinds of people come in so he has to speak a little of everything. Did you ever think of a problem such as mine. I don't know very much Spanish and I have to go to her house every once in a while and I'm there trying to translate my English into Spanish when I don't know my Spanish that well.

F. When you're talking to her father?

M. Yes.

F. What happens?

M. I just don't know. Like I'm very talkative and when I go to her house I only say about ten words and that's that.

L. My mother thinks he's a very shy boy and I laugh because he's not that way at all and my father comes from Colombia so he speaks very good Spanish and he always corrects me but he doesn't do it to him as often when he (M) comes over because he's afraid that if he does correct him he'll (M) keep quiet altogether. And, but he's very quiet when he comes to my house and we always have arguments over that because I want him to talk and my parents think that, oh my goodness, he's so shy and everything and he's not shy at all.

F. Why don't you talk English when you go there?

M. Because I'm afraid they might not understand me. Like her father doesn't understand me that well, so if I said something in English it might get through to them and it might not so I'd rather not take a chance.

F. Do you think their English is worse than your Spanish? Do you speak English to Liz's mother?

M. Well, more than her father.

F. But still not very much, even her mother thinks you're a shy boy.

M. Also, I really, I hardly don't have anything to say to them. You know good evening or good-by.

L. You don't have mutual interest, that's just it.

M. That's it, I don't have anything to say to them.

L. My father isn't for sports as he (M) is, and like a lot of men like baseball, basketball and whatever, and my father doesn't like sports very much and he (M) loves sports. And he can't come over to my house and start talking about sports. My father wouldn't know what he was talking about and I think the only time that you could get my father really talking is when he's slightly polluted. And...

F. That helps anybody talk.

L. Yeah. But otherwise it's terrible, cause when he comes to my house he hardly says a word. And his Spanish is really bad, I must admit.

M. It's not that bad.

L. I think it is. I think my Spanish is much better.

F. I want to find out about that. George says he can't remember any occasions in which he spoke English to his parents and they told him not to. That's still so, you still can't.

C. Well, I couldn't see myself speaking English to anybody in my family except maybe some cousins who are my age or a bit older than. To them I speak English sometimes, but mostly in Spanish. But my whole family that would be the only ones where I would speak English.

F. Tom, do you remember an occasion when your mother and father said speak Spanish to me don't speak English?

T. No, I can't. Like I said when I do have this urge to speak Spanish I do speak to them in Spanish but they've never told me to speak to them in Spanish, cause they understand, they speak to me in English at times also.

F. They're not particularly interested in your knowing Spanish?

T. No. I can speak Spanish.

F. But they're not particularly interested.

T. Well, no, I don't think so.

F. His father said...

R. Speak in Spanish, right. They'll understand me. Whatever I say in English they'll understand but he wants me to pick up more Spanish. Because first of all, we were going to move to Puerto Rico so that's when he really got on the kick of me speaking Spanish. Now that we're not he still tells me to speak Spanish, although most of the time I still speak English.

F. Well, let's take it off the family for a moment. You were in the middle of something, weren't you Tommy?

T. Well no, I just want to make myself clear you see. They never correct me, they never tell me to speak Spanish, but I can speak Spanish when their friends come over and when I have to speak Spanish I'll just naturally know it, naturally speak Spanish. However, I do speak to them in English and they speak to me at times in English. Most of the time it will be in Spanish of course and I'll reply in English unless I feel like speaking Spanish. But I can get along pretty well with my Spanish.

F. But there is no occasion which they actually ask you to speak Spanish?

T. Well, you see, if I know they want me to speak Spanish--there are situations where I know I have to speak Spanish and of course they would expect me to speak Spanish.

F. Like when?

T. When their friends are over and they don't speak very much English. I'll just naturally come out and speak Spanish but I think I can anticipate when they want me to speak in Spanish.

F. It's just when somebody is around who doesn't know English?

T. Right.

F. That's the only time?

T. See, but then I don't have to be told I'll just know, I just naturally speak Spanish.

F. Ramón, you told us your father would say, "Speak Spanish".

R. You see, the thing with my father was, that with my sister he would always make us speak Spanish in the house so she would pick it up. That's when she was very small, and with me they never cared much if I learned it or not for some reason or another, mostly because I was always playing with something, so later on they saw that my sister was much more fluent in Spanish than I was to a great extent so they want me to speak Spanish at home now.

F. Gil, everybody was telling me about when they speak Spanish at home and when they speak English at home, and to whom.

G. I speak it all the time at home. I hardly ever speak it except to my brothers really--with my family it's hard to get across a point without speaking Spanish in my house. Even if they, you know, part of the family knows English, but they just can't take to it very well.

F. Your father knows English?

G. Yes.

F. Your mother knows English?

G. Well, my mother's dead but she did.

F. Your father knows English but you speak Spanish to him anyway?

G. Yes. Maybe once in a while I might let loose some.

F. Why do you think that is, since he speaks English, why do you speak Spanish to him?

G. I guess it's because I was always adapted to it since I was small, to talking Spanish to him since I, you know whatever I learned in school, I used to talk English in school, not at home.

F. Did your father ever tell you to speak Spanish?

G. Did he ever tell me to speak Spanish? That's what I speak.

F. Did he ever have to tell you?

G. Not my father. My aunt, many times. I would be speaking in English and she didn't understand what I was saying. Sometimes, you know, I might say some word and she doesn't understand. She'd say, "Speak Spanish". That way I get across what I have to say.

F. Do you have brothers and sisters?

G. Yes, five.

F. What do you speak to them?

G. English.

F. Never any Spanish?

G. Hardly ever.

F. Sometimes?

G. Maybe once in a while.

F. About what?

G. Maybe when I'm angry or something like that.

F. When you're more emotional?

G. Right. But never have any need to speak Spanish to them because they understand the English very well; in their school, the environment around the school; at home it's only the parents you have to talk to in Spanish.

F. If that takes us to the family can you think of someone outside the family who knows English but you speak Spanish to?

R. That goes for my uncle really. He knows English like my father would know it. He could speak to anyone and hold a conversation but when he comes over to my house, I'd prefer to speak to him in Spanish, because I know he prefers me to speak in Spanish.

F. Why? Why?

R. I think he'd feel better you know--he'll say, "Ah, he's speaking to me in Spanish". Although he knows English and he knows that I know English, but you know it's like cursing almost, because I know although he knows English he knows Spanish much better and well, let's say, well he went to high school in New York so he knows English pretty well although he comes from Puerto Rico, but he feels a lot better when I speak to him in Spanish. He feels that I'm being more courteous, let's say.

F. He actually likes it. He feels that it shows respect or something.

R. Right, he sees that I'm being more courteous to him. I'm being more respectful. So he actually likes that.

F. Does Spanish tend to be reacted to as being more courteous when you use it? More proper?

R. Yes, I think so.

G. Of course, it depends on the person. I mean if you're talking to a Spanish person in Spanish, it's respectful.

C. That's what I mean, if you're speaking to an adult.

F. No. I'm talking about people who know both languages. If you only know one then I can understand why you have to speak that one, but if they are people who know both, do you speak Spanish to them because they think that is more courteous; they react to it being more courteous?

C. Yes, I know a lot of people in my building--a lot of relatives. Like my uncle for instance. He's 56 and he came when he was 15 from Puerto Rico.

F. Oh, my, 41 years ago.

C. So he went to elementary school, he went to Junior High School, he was in the army until 1945. He speaks perfect English but I only speak Spanish to him.

F. Anyone else have an example like that?

G. Dr. Fishman, is there a specific question that you asked in the beginning that I didn't get?

F. Yes. It is when do you speak Spanish and when do you speak English to people who know both--that is my real, major question. Not to people who know one or the other, but to people who know both. What people are they who know both and you nevertheless speak one or the other mostly to them. Now we started with the family, just so it wouldn't be a wide open question. Now both Ramón and George have family members to whom they could speak English or Spanish, but I get from both, in a sense, that when they speak Spanish to them those people like it better and they think it is more respectful, more fitting, more appropriate.

M. Seems to me that their families emigrated from Puerto Rico at a late age.

F. But his uncle came when he was 15. He's now 56.

M. Oh, except for a few exceptions, that's about it. Most of them came when they were about 25, 30, 35, 40, 45, like for instance my grandfather and my grandmother. They came from P.R. when they were about 45 years old. Now you don't expect them to start learning English at 45 years old, not that well anyway.

F. That's too late?

M. Most of the time when they are at that age, like my grandmother, she would stay at home and take care of the house. She hardly went out and when she did all the surroundings around her were to speak Spanish. You know, a Spanish neighborhood, where all speak Spanish. My grandfather had to go out and work, during the Depression, and well, he had to learn English and that's when he started. But their children when they came, (all of their children came from P.R.; my mother was the youngest, she came over at 4 years old) I mean all of them, all of them speak English, perfect English, but they speak Spanish also.

F. Do you think your parents are glad your grandfather insists on some Spanish? Are they glad that at least he is insisting on some Spanish?

M. Yes, my mother likes it very much. She likes me to speak Spanish to her, but I never, unless I get the urge, I won't speak Spanish.

F. This urge. I've got to understand what this is.

M. You know, like she owns a beauty parlor and once in a while this urge hits me and I'll enter the beauty parlor. She'll be working on a customer and I'll start speaking in Spanish to my mother. My mother would tell me don't speak Spanish because the lady might think you're saying something bad about her, so I have to stop right there and I have to start with the English and I have to translate what I said. It's just, just the urge, that's about it. I don't think I can explain myself. And I'll speak it the whole day.

F. Someday, sometime, you speak it the whole day; any particular day that it might be?

M. Usually when I'm refreshed. When I'm tired I just, I either don't say anything or I'll say a few words and that's it.

F. How can you speak it all day if you speak it as badly as Liz says you speak it?

M. Well, I'll speak it bad when I don't know exactly what I'm saying, when I don't know exactly what to say, but if I know what I'm going to talk about then it, it comes to me like when I'm in her (Liz) house I won't even try, I don't even try and speak Spanish to them you know. I'm nervous about it because, I don't know, what if I'll say something wrong because I know they know Spanish very well and I don't like to be corrected, so, I mean, from my grandfather I take it because well he's my grandfather, but outside of that I don't like to be corrected about my Spanish.

F. You could speak English to him, but he also thinks it is nicer if you speak Spanish to him. I guess it's like these other two cases, and he actually corrects you so you get it right.

M. Right.

F. So you learn some more. Anybody outside the family, not a family member, who knows Spanish and English, but you think and he thinks it's appropriate to talk Spanish to?

G. Well, I think in actual way, you know, most of the teenagers they talk to people older than themselves in Spanish because it's like a phrase of respect, like showing respect to them. They know Spanish, they are Puerto Rican, so why not speak in Spanish. You know they consider themselves more Puerto Rican than the Puerto Rican that is here, because they came over--like I was born here so, well, I would say I'm a Puerto Rican New Yorker, but they consider themselves more Spanish so they want you to speak Spanish to them.

F. Two of you that came in late, do you gather what we're talking about? I'm trying to learn when a Puerto Rican, who knows both Spanish and English, uses either English or Spanish, with whom and with actual examples that would help me the most.

R. Well, I work in a drug store and when people come in if they are elderly I speak Spanish to them, not very well, but I try, and when you want to talk to somebody and you don't want the boss to listen in, you speak Spanish and when you want to fool around, or with customers, which you can't do in front of the boss in English, I do it in Spanish and I only speak Spanish most of the time only in the store and it's to my older relative I speak Spanish. Up until then I use English all the time.

F. How about at home?

R. English.

F. They don't know Spanish?

R. My mother was born here. She's not of Spanish descent, but she knows how to read, write it and speak it. My father was born in Puerto Rico--no, he was born in Cuba and he knows how to speak Spanish and my mother learned it and we learned it.

F. Do you speak it to your father?

R. No, they're separated, but we only speak English at home.

F. Even though they know Spanish.

R. Yeah.

F. Do youever have a kind of impression that you know if you spoke one or the other you'd get your way more? In other words you could use it to get your way with either your mother or your father. Would it help you to win an argument or get a favor or something like that? Did it ever work out that way?

R. Well, my father speaks in Spanish. When I want a favor, I'll speak to him in..., I'll speak to him in Spanish. All other times, I'll usually speak...

F. Tell me about that, that's terribly interesting.

R. When I want money or something.

T. Exactly.

R. I'll speak to him in Spanish, you know, first. I'll have a little conversation with him in Spanish. I'll put him in a good mood and then I'll strike him for the money, you know.

F. But you speak Spanish mostly to him anyway?

R. No, with my father I speak to him practically all in English.

F. Even though he says "Speak Spanish to me"?

R. Right, because nevertheless I'll speak English to him most of the time but when I want something I'll speak to him in Spanish most of the time unless it's for something that I couldn't express myself well in Spanish.

F. No, but this getting your allowance and getting some money.

R. Well, I'll speak to him in Spanish and for my mother well I'll just speak in Spanish a little more. You know, a little more affectionately. You know the Spanish.

F. You must have found that it pays off that way.

R. It does.

F. It does? Did any others have experiences like that?

M. I do with my grandfather mostly. You know he has an old saying, "the best friend is a dollar in the pocket". In Spanish it is, "el más bueno amigo es un peso en el bolsillo", so every time that I'm going to ask him for money I say I need a friend.

F. Is that what you say?

M. In Spanish.

F. What do you say?

M. Eh, necesito un amigo o necesito cinco amigo. Five friends, ten friends, as many friends as I need I would say that. Well, he says, well I can't. How about two? When I say five he says two. I'll say three and he'll two-fifty. We'll cut it down and make it about half.

F. You have the impression if you didn't do that in Spanish you wouldn't get anywhere with him on that.

M. Well, not exactly. I think I could get it if I talked in English but...

F. It wouldn't go up to two-fifty.

M. Yea, it might not go up two-fifty.

F. Tom, anything occur to you?

T. Well, on and off I want my mother to iron a shirt or something. I'll say please iron this in Spanish or...

F. Now how do you say it.

T. "A plánchame esto yeah, come on, a plánchame eso aqui." I'll say, of course, you know, more familiar.

F. Like what?

T. You know, I'll say, Ma, toma, plánchame esto, like something like that or when I do need money I'll approach them in Spanish.

F. Now you mention the case when you speak mostly English to your parents.

T. Right.

F. Yea, but you have the impression that if you really want to get some favor that if you said it in Spanish you're more likely to get it.

T. Well, there are things that you just naturally you know feel like asking in Spanish. My father when I need money from him well I'll just say, Pop, can I have two dollars, something like. I'll say it in English, but for instance, when I'm playing with my father, like if I want to borrow the car I'll tell him I want to borrow your car. I don't have my license yet, but I'll say, "préstame el carro." You know that's just playing with him and he'll react.

R. I bet.

T. He plays back, but it's not a matter of getting away if you speak one language or the other.

F. Well, you gave me an example about your mother ironing your shirt.

T. Well, I could just as easily say "iron the shirt."

F. I know you could, but you didn't.

T. I just say plánchame la camisa.

G. I think they feel better when you talk to them in Spanish, you know, you ask them for a favor.

R. They know you're getting around them. They do. They know.

G. They feel nice. It's just the way you say it sometime. You say it with a certain little ting to it that they like.

F. Like like what, what do you mean like a ting.

G. I don't know. You know you talk to, let's say, grandmother right, you tell her, "Mira mija ven acá" you know, "y plánchame esto aqui te doy una pecita ahí," you know, things like that you know, little jokes, you know, and they just do it for you because they just know your jokes they make them laugh, and right away you get it. You gotta do it a certain way though. If you said it in English, if they don't understand it very well, you know, even if they know both languages, but it wouldn't have that little feeling to it.

R. And also let's say when you speak to someone, let's say to my father, he don't know both languages. Since, if I speak to him in Spanish, I'll know I'm putting more effort into cause I could speak to him better in English so if he sees I'm putting more effort and you know speak to him in Spanish right there you know he'll say, oh at least he's trying you know trying to trying to do it the hard way. You know, speak to me in Spanish, so right there you know that puts it in my favor.

F. The only example that you have been able to give me outside the family are just generally older people, but is there some specific person outside the family that any of you talk Spanish to.

G. Well the guys most. Sometime you know like we'll be with the guys. We say "como está, jebo?" That means, that's like a slang, how are you, how you doing friend.

F. Un

G. Translating: como está jebo means...

F. Jebo?

G. Yeah, guy, it means boy really, and they use "este dame cinco," that means slap me five.

F. Dame cinco.

G. Dame cinco.

T. This is all slang of course.

G. Yea, this is all slang.

F. So you use Spanish with the guys for a kind of kidding around.

R. But I think well he'll do it just, you know, maybe to say hello or something, but after that he'll speak completely in English.

T. Well, you know, they'll carry on of course. If you have a girlfriend they'll say "como está la nena?" How's your girlfriend, or actually translated, "como está la nena," how's the girl, how's your girl.

C. And then the rest will go on in English. Most of the time, well you know, I have a few friends you know, who don't speak English very well; some Puerto Rican, some Dominican, Cuban. You know I speak to them a mostly in Spanish, but you know there a few. Then with Ladi, you know, we might carry on a conversation in Spanish you know once in a while.

F. Why with Ladi?

T. Ladi is you know nationalistic.

F. What, what does that mean?

T. Very proud of being a Puerto Rican. Occasionally, you know, we'd carry on a conversation in Spanish.

F. Ladi, how come he told me he doesn't know much Spanish?

T. He speaks Spanish all the time. He's on a student court with me and even when there are, there are you know people around that don't know the language he'll speak Spanish anyway. I'll speak to him in English. But there's a reason, there's a reason because he didn't do that before. He used to speak in English, but there was over in our club somebody said they should try to speak the language more often and since then Ladi everytime he sees anybody in the club he starts talking in Spanish. But I'd like to say that, you know, we're good friends and everything, but he is you know a bit strange at times because at times he'll only speak Spanish, but then he might come to my house, then he'll speak to my mother in English, and I say, don't do that, don't do that, but then, my mother says let him if he can't...

F. You mean he'll talk Spanish to you, but then when he comes [both talking at same time] English to your mother.

T. Right, right, man, and sometimes he'll only speak English.

C. I guess he's trying to help both of them out; help one speak Spanish and help the other one to speak English.

M. Ladi, he's unconsciously a double-talker, unconsciously he double-talks. He'll go about the same phrase three or four times trying to tell you the meaning actually, even though you know the meaning he'll tell you again; it's that way whatever language he uses.

F. I see, he double-talks in both languages.

T. It's not really double-talk. It's that he tries to use words that he doesn't master and as a result he gets tied up in his own words and of course he has to say it several times, and he'll have to, you know, go over the same thing, but using words that he's more familiar with. But there are times when he tries words that he's not acquainted with or, you know, he doesn't really master these words, but he'll use them hoping that you don't know the meaning, and if you do then of course he'll get tied up and this this is what happens.

F. Any more so in Spanish than in English?

T. No, it's in English, I think. You see at some of the club meetings you notice that he goes on and on about a certain thing and he's not really saying anything new. He's just saying the same thing over and over, but using different words.

F. Will he do this in Spanish too?

T. I don't know about Spanish.

C. Yeah, yeah he will.

F. Yeah.

M. At first that was one characteristic which I hated. One time I disliked him because of that. He use to talk so much I wanted to get out from the meeting. He did bla bla bla bla.

F. You seem to have a couple of friends your age who know English perfectly well, but you and they like to talk in Spanish together, not just little a slangy words like Mike uses, but whole...

C. It would be Ladi, Ladi would be one. Robert, Valentín, but Valentín you know.

F. Valentín is special because he's just arrived here from the Dominican Republic.

C. Right, he gets me confused.

F. Now what, what is there about these few kids and a few of your friends that you speak Spanish to, really speaking rather than just joking around a couple of words.

C. Well, in the case of, you know, Ladi like I said very nationalistic, I mean proud. Robert you know apparently speaks it at home, he can speak it better than you know most of the other members of the club and he's just...

F. Is he nationalist too?

C. No, not really, not Robert, but I'll speak it with him.

F. Anybody else have an experience like that of speak...

C. Oh and excuse me, but Robert, I believe was born in Puerto Rico and he did go to school down there.

F. I see, he's more recently from Puerto Rico.

C. Yes. I'm trying to think of somebody else.

F. Tom, have you ever had this experience?

T. Well, you see, I have very close friends and we do sometimes we do speak some slang Spanish like we're describing a girl that's walking or something, we'll speak in Spanish, but...

F. What would you say?

T. Excuse me.

F. What would you say?

T. "Mira esa jeba!", something like that, but I have other friends that I'm not that close with and I find that sometimes I will speak to them in Spanish. I guess this is just cause it's common. It's something that we just have in common and this familiarizes us more with the other persons and so we, I will speak to them in Spanish at times.

F. Not just a word here and there, but a...

T. Well, more, more than I would normally speak to my better friends, but I said when I'm with my better friends we do occasionally speak a couple of sentences in Spanish and then drop it and then we'll resume in English, but there are times when you do speak to friends that's not as close in Spanish.

F. And you say you speak it with a friend that you're not so close with in Spanish in order to get to know them better, is that...

T. Yeah, I think so. I guess that would be the only reason.

F. To become somewhat more intimate with them, so closer feeling of friendship with the person that you don't know so well.

R. It depends if you don't know if he speaks English that well you know, like let's say...

T. No, even then, even then I find that I will strike a conversation in Spanish.

R. Throughout most of the time if I, if I see a friend of mine even if I don't know him that well, I'll just speak to him in English. I don't know anyone that I'll speak to Spanish right off the bat unless I know him.

F. Your own age, you mean a friend.

R. George, he knows Spanish very well but whenever I speak to him he knows that I'll always speak to him in English. It'll be very rare when I'll speak to him in Spanish, just something.

T. But even when I do of course it's not a lengthy conversation in Spanish because of my own handicap of the language, but it is more than I would speak to other people in Spanish.

R. But you know with my friends eventually we might start you know speaking in Spanish maybe hold a conversation, but eventually it will end up in English. It's a matter of course you know.

F. Did you ever speak Spanish to somebody who is not Hispanic.

M. Yes, like for instance showing off, you would have a say, I have a friend by the name Alex and a when he get me mad I tell him off in Spanish so that he doesn't know what I'm saying about him.

F. That's not fair. Someone not Hispanic that knows Spanish that you speak Spanish to?

M. Well, in that case I could only think of you know a teacher in school who teach a Spanish course. I know the first two periods you know I'm on squad down at the language office in school. And then you have Mr. Walensky, Mr. Wagan who all speak Spanish and eventually you know sometimes I'll strike up a conversation with them in Spanish but outside of school teachers I can't think of anybody else.

F. How do you feel when you're speaking Spanish to a school teacher who is not himself a Hispanic?

C. Well, you know some teachers like Mr. Wagan who you know spend a lot of time teaching you know in Spanish neighborhoods and Mr. Walensky also who taught over en el barrio, with them I feel at ease, but then you know some other teachers I...

R. In a way you feel superior towards them.

C. Not necessarily superior but...

T. I mean you have a person that that's been studying Spanish, the language of Spain and you supposedly Puerto Rican you probably think that your Spanish isn't equivalent or isn't you know you can't speak it as formally as they speak. Then you maybe speak it to them, but you might you know unless you're very confident you'd be you'd be watching out for your mistakes in grammar and whatnot and...

F. You feel funny that here is a person who is not himself Spanish and maybe his Spanish is better than yours.

A. Right.

F. Yea.

M. I mean a teacher, right, he's studied it a long time, possibly more than eight years, right. Let's say a teacher whose teaching Spanish hesapplying all the grammar and little technique. You'd speak Spanish and you'd probably be looking out.

C. With me it depends on the teacher. Actually, like Mr. Wagan, I think he's hip. That's why I respect him. He's forceful, in other words he makes you work like a dog in school. That's why in a way I respect him. He knows what he's talking about, but some other teachers like I think of it this way. Look at all the years you went to school. You still don't know half the Spanish I do. That's when I feel (hurt?).

F. But what's the difference between this better Spanish and the Spanish that you speak? What is the difference between the Spanish that the teacher has learned and the Spanish that you speak?

C. Well, the teacher will you know almost in all instances pronounce every letter in her words you know. She won't use any slang that you might know, you know, but I never feel myself inferior to any of the teachers that taught me. In fact I might start a conversation in Spanish and eventually they'll interrupt and speak English.

F. You wear them down, in other words.

M. Yeah, see when they talk Spanish they know what they're saying, but they like say one word, pause, say one word, pause, one word, pause, so they can like catch up with themselves while an actual Hispanic person will...(makes comment with lips movements). I mean I've seen some Spanish people especially my grandfather, he can talk that Spanish so fast you can't understand unless you got a a microphone to take it over and bring it over your house and listen to it all over again.

F. I have I have a tape recorder. I might do that some day. Tell me about talking Spanish to teachers in high schools, since you all seem to have had this experience. Do you try to talk better when you're talking to them so as to show them that you can talk as well as they can.

M. I guess we all try.

T. Yeah.

F. Yeah.

R. Sometimes it doesn't work out though.

F. What, tell me about some.

T. Well, I would try to speak as little as possible in Spanish, Spanish class. That's because I do the work, see. I've always been able to get very high marks in Spanish without doing much work and this is because I knew the language. I can write better than I can speak and as a result, ah, my vocabulary, the formal vocabulary you're supposed to know, I never really mastered, and, well, that's why I-I'd try to speak as little as possible in class as I can, cause it's very embarassing when knowing you're Puerto Rican and you're not being able to speak, say what you want to say as articulately as one of the other kids you know that isn't of Hispanic background, so I-I normally sit in my seat and when we have to write something I'll write it, but I speak very little in class.

F. Any of you have the experience of trying to speak, ah, better than usual because you're speaking to a teacher, and he has studied up on it, and you want to speak better than you usually do, because you want not to be embarassed in front of the teacher who just studied it?

C. I guess so because, ah, I know when I speak Spanish everything I usually get wrong are the tenses. I use the wrong tense and that bothers me because after I say what I supposedly want to say I realize that is the wrong tense, and here's a teacher that's taken up the the Spanish language and he knows his tenses backwards and forwards, and he can say "I had gone yesterday somewhere," and I'll say "I would have gone yesterday" in the wrong tense so I feel inferior. I don't see how you can feel superior to a teacher when this teacher knows many more words, antonyms I think it is called, and synonyms, you know, many more than you do.

G. Like just recently I wanted to find out the word "cheap" in Spanish so I found out. Mr. Wagan, he's my Spanish teacher, he told me what it means. I cannot be superior to him now and that's why I want to take more Spanish now.

G. You use one word all the time, you know, you say all the time "muchacho," let's say, and then when you go to school, in the books, they have "chico" and they have...what's another word for boy in Spanish like in a course?

L. El niño.

G. No la niña is old. There's other words. I just learned that word last week. That's why I threw it in, but ah it's the same thing in Spanish so I-I think the teachers are much smarter and that's why I plan to take Spanish when I go to college cause I want to learn it much better. Then you have to remember that although you know you might have grown up with Spanish that they did go to college. They studied literature more than you have, so naturally they have a better vocabulary, but you know it doesn't mean that they're going to speak better Spanish than you. I mean you know throwing out fancy expressions, you know, that somebody else doesn't know, you know, that that doesn't necessarily mean, you know...

M. Well, actually, like when I'm in class, my main problem is the tenses. I get that wrong all the time, but a it's not actually that they know more than you, it's that you're using a different way, like for instance in Spanish, there's "yo bajo mañana. Yo bajo pa el cine mañana" and they would say "yo bajará."

F. bajaré?

M. bajará.

R. bajaré.

M. All right bajaré. I told you: bajaré mañana. Now there's the difference in tenses and that's where I would get wrong even though I would say it right in my own way, it could be said differently. I don't know how to explain it, but it's something with the tenses.

F. Mike, would you like to talk Spanish to me.

M. It's a challenge, why not.

F. Would each of you try to talk Spanish to me, if I wanted you to.

M. You mean this conversation now?

L. Right now?

F. Yeah. Let me try, let me try and ask you a question in my Spanish, then all of you talk Spanish for the next couple of minutes, all right? Now you'll hear what my Spanish sounds like. A mí me parece que hay dos modos de español, dos tipos de español, un español correcto, formal y un otro tipo informal, popular y ¿qué tipo de español les gusta más, el español formal o el español no formal, popular? ¿Qué tipo de español les gusta hablar mas?

C. Bueno, hay que distinguir con lo que Ud. quiere decir con formal, popular, porque formal puede este querer decir vamo a suponer pronunciar cada palabra, cada letra en cada palabra. También quiere decir Ud. saber hablar español sin errores y con un vocabulario grande. Este a mi me parece que Ud. quiere decir con español formal usar la palabra correcta y eso pues si así es el caso pue me parece que que español formal sería lo que a mi me gustaría hablar.

F. Y con tus padres, con sus padres Ud. habla formal.

C. Sí.

F. Sí, y no popular.

C. No.

F. Tommy, Ud.?

T. Yo creo que los dos los dos tipos son esencial porque, porque cuando uno habla con adultos o sus padres uno habla en español formal, pero cuando habla con amigo o alguien que conoce muy, muy bueno entonces habla en español familiar.

G. Yo me siento mejor cuando hablo español popular porque cuando hablo español popular (pause), siento como que estoy en la familia y puedo decir la cosa mejor, lo que siento. Si hablo formal pue no me siento bien. En el español popular, yo creo que yo me puedo defender con el español y por eso, que yo no lo cojo en la escuela, porque creo que no estoy usando mi tiempo bien, yo mejor cojo francé en vez de español, puedo defender en español popular, no formal, que hablo en español popular.

F. Y ahora vamos oír a Mike.

L. Oh God, boys you're gonna die.

M. Ahí donde está, el español no es muy bien. Yo te lo dijo ante.

T. Cuando Mike habla español, él no tiene el accent de lo ingleses de lo americano el tiene el habla español como si supiera la lengua y sin accento americano o inglés.

L. Te puedo preguntá algo. Cuando tu está hablando con tu pap, tu lo llama "Ud.", Ud. dice "Ud"?

M. No, le dice "tu".

F. Bueno, Ud. no ha dicho nada.

R. Bueno, con los padres mío yo le hablo bien popular, le hablo como, la única manera que se habla el español, mientra que en la escuela trato de hablar, Ud. sabe, mejor, que lo mejor que pueda, pero a vece no sabe, no sabe bien.

F. Y le cuesta trabajo hablar formal en en escuela?

R. Me pase mucho trabajo sí, porque empiezo hablar algo y entonce sigo hablando entonce no se que decir porque empiezo hablar español pero lo pensamiento mío son en inglé yo creo pue ahí hay una dificultá. Porque mucho, aunque hablen español, pero tienen que pensar lo que van a decir entonce como en la mente lo traducen, entonce sale en español, primero hay que pensalo en inglé.

L. No le sale natural.

T. Y otra cosa cuando Ramón y George hablan español hacen movimiento con las manos, pero cuando un americano o inglés habla español no hace esta misma moción con la mano.

F. Pero en el inglés también hay hay dos modos; hay un inglés popular y un inglés muy formal y no les cuesta trabajo a los Americanos hablar formal ó popular en inglés.

R. No pue vamo a suponer algo. Cuando yo le voy hablar a mi tío, vamo a suponer le hablo, le trato de hablar, tu sabe, bien, el español mejor que yo sepa.

G. Me parece que cuando una persona empieza hablar español a una persona que tiene máh edad que nosotro nosotro arreglamo el español más bueno y queremos usar unas palabra, este, grande y no podemos, entonces bajamo, nos bajamo nosotro mismo.

R. Si eso pasa mucha vece en clase de español, que yo empiezo hablar, y en vez de decirlo correcto no encuentro que decir y ahi mismo ven que no sé el español como lo debo saber verdaderamente.

L. Lo hablas, lo están hablando bien porque no están nervioso, pero cuando ello van a la escuela...Porque están aquí, entre amigo, y si ello se rien a u no, no con malicia. No sabe porque es, sabe porque es, porque yo se que ello, ninguno de ello hablan...el español mejor que yo.

R. Bueno yo no me pongo nervioso, me pongo máh nervioso aquí porque aquí hay máh gente.

L. Oh no, no you shouldn't. Tu no está nervioso.

G. Y también algo que el español que habla lo puertorriqueño aquí y otra nacionalidad hispánica que cogen palabra. Como usa el señor William en la escuela, vamo a decir una palabra como camión que es como lo norte americano llamarían truck pue dirían troque o algo así.

R. Y el rufo en vez de la como se dice el techo.

M. El techo, cuando yo estaba el otro día, que yo estaba en la escuela en la clase española este la maestra me dijo este yo le pregunté como dice este loco, una palabra máh fina que loco, y el me me dijo dementado y y ante de eso yo dije, yo decía "crazy."

F. Que tipo de español van a hablar sus niños? Sera posible que sus niños no puedan entender el español fino?

R. Bueno, cuando yo tenga niños le voy hablar como yo pueda péro quisiera que ello aprendieran el español mejor que yo lo sé. Pue en ese caso quisiera que ello estudiaran el español primeramente en escuela y segundamente conmigo también, ó con mi esposa que sepa mejor el español, pues creo que aunque hay otras idiomas que deben ser estudiado, también el español, como todo soy puertorriqueño. Eso un es una idioma que debo saber porque si a un tiempo voy para Puerto Rico yo no voy, yo no voy a ir como un turista. Yo quiero ir como puertorriqueño y hablar.

F. Puede ir como turista, no?

R. Si pero quisiera hablarle a mis como se llama.

Group -- parientes, familia.

R. Parientes en español, no le voy hablar como un americano, quisiera hablar, tu sabe, como familia que soy.

M. Una cosa que es muy interesante es como mi madre, o mi abuela, mi abuela este la española, este cuando era más, este...young.

Group -- joven.

M. Hablaba mucho inglé, mucho más inglés que habla ahora y cuando se puso de esta edad de cincuenta, sesenta ahora habla más español. Es una cosa que no puedo este comprender. Bueno tal vez cuando una persona es joven Ud. sabe tiene la mente máh abierta y tu sabe se le hacen facile las cosa que cuando ya se está poniendo este máh viejo pue quisá...

F. Puede ser otra cosa, que los jovenes van a trabajar en la ciudad pero los ancianos se quedan en casa y hablan solamente con la familia yo no es necesario hablar inglés con la gente en la familia. Es posible o no?

R. I guess.

F. Pero no es posible que cada año los jovenes puertorriqueños de Nueva York van a hablar menos y menos español y van a olvidarlo, poco a poco, y después de unos anos, unos diez, veinte anos, no van a hablar español más ni sus niños tampoco.

G. Eso es verdad; eso es lo que yo pienso también, por lo meno así mis amigo...

F. Ud. lo piensa tambien?

G. Ese la verdad.

R. Creo que no van a saber hablar español tan bien como sus parientes pero creo que alguna palabras se le van a quedar como pueden hablar un poquito, lo puede hablar a su padre quisá le pueden hablar en español pero no van hacer tan bueno.

F. No será una gran mezcla de inglés y español y...

R. Ello pueden hablar, empiesan hablar en español entonce cambian y empiezan hablar en inglé eso que, bueno en mi familia pasa eso mucha vece cuando le hablo a mi padre.

T. Esto eso es evidente ahora porque cuando los niños se casan joven y tienen hijos y le hablan solamente en inglés. Pero mientra hablan en inglés, solamente en inglés, ellos mismo no hablan inglés, tu sabe, como inglés muy bueno, y pues los hijos no saben español y nunca aprenden el inglés muy bueno tampoco. Yo creo que en veinte años todavía hablarán español pero una forma de español mas formal que familiar.

F. Van a perder el español familiar pero no van a perder el español formal porque es de la escuela y no de la casa.

T. Sí.

M. Oyendo a Tomás, este habla como esta máh americanisao que yo, porque cuando el habla español el...

R. Si, pero la cosa es que el habla así también en inglé. El no habla español casi nunca en la casa y Ud....

M. Tengo máh practica.

F. Porque si Ud. no habla?

M. Pue yo hablo con el abuelo mio pero eso es mas que quince minuto de cada día y to la hora del dia yo hablo inglé mah.

F. Le cuesta trabajo pero no habla con acento.

M. Uhum.

F. Pero a Tomás no le cuesta trabajo hablar pero habla con acento. Como puede ser eso?

T. Pues como a yo hablo inglé la mayor del tiempo y he leído mucho en inglés y tengo mucha práctica en inglés porque a...

F. El lée también.

M. No, yo leo el periodico, pero una cosa este, que mi abuela me hablaba en español y mi abuelo me hablaba español. Puede ser porque yo sé hablar español máh bueno que él.

F. Podemos hablar de de de una otra cosa unos momentos? Qué créen Uds. de puertorriqueños nacidos aqui que dicen que no entienden y no hablan una palabra de español? Qué créen Uds. de eso?

T. Pues si dicen que no...

M. I didn't understand what you wanted to say.

F. What do you think of Puerto Ricans born and raised here who say they don't know any Spanish. You ask them. They say, Oh I don't know a word. You think it's true?

R. That's a lie.

T. I have a cousin that was born in Puerto Rico, I have a cousin that was born in Puerto Rico and a she came she came here when she was about seventeen and she speaks English pretty well, but she doesn't teach her children Spanish and meanwhile they look Spanish. They, you know, you can tell the Spanish from a mile away, but a she doesn't speak to them in Spanish. All they know is English and when she use to speak to my parents and tell them that her kids don't know Spanish my parents, you know, feel like this is artificial. It seems that, you know, they feel that she is trying to be something she's not or that she's losing hold of her culture and that she's not passing it on to her children. So they feel offense when when you have someone in your family that brags about their children not knowing any Spanish at all.

F. But it may be true where some of you thought it wasn't even true. He said he thought it was, they were kidding.

M. Well, it depends on where the child is brought up. Like for instance, we call the "paddys" any nationality which isn't our own, but there are exceptions, like for instance when when there's a Puerto Rican risen among paddys, he learns their ways. He learns not to speak Spanish because how could he speak Spanish when no one understands him.

F. What do you think of him?

M. Well, I think of him a paddy, even though he is Puerto Rican. I don't care. He's a paddy. He talks like them, he dance like them, he does everything like them, so how can he be one of us.

F. If you don't know any Spanish you stop being one of us.

R. All right I say it in English, before you know I would see someone that let's say with the name of García right, typical Puerto Rican name or Spanish name, and let's say he didn't know a word of Spanish. Well I would say, gee whiz, I see this Spanish guy and he doesn't, he can't speak Spanish. I would say he's kind of stupid you know. He's Spanish, but he...

F. Just stupid. Is that all he is?

R. Well, either that or he's or he's ashamed of his culture. But now I feel that it's not his fault sometimes. Sometimes, it's the parents that just don't teach them. Well, see I was brought up in New York; I've never been to Puerto Rico except when I was born there and what little Spanish I know is because of my parents; now I could see someone that was born here and his parents didn't speak to him a word in in Spanish, well how how could he learn, you know?

G. Right, now when I see a person you know with a Spanish name who doesn't a speak a word of Spanish, now I wouldn't think any less of him as a person because I figure, well, two more generations and the Puerto Rican community...it's gonna be more widespread.

T. Well, one observation, before when we began speaking English again, I found I was thinking in Spanish, I put so much effort into speaking Spanish so that when we resumed speaking English I found myself thinking in Spanish and speaking in English.

M. Well, one of the things which also bothers me about the Puerto Rican which turns paddy, I do have contempt for him because for instance he's a Puerto Rican, he hangs around say with the Irish and he'll go to the Saint Patrick's Day Parade, but he won't go to a Puerto Rican Parade...

F. Which parade is that?

Group -- Puerto Rican Parade.

T. Puerto Rican Day Parade it's when...

M. He won't go to a Puerto Rican Parade. He's a Puerto Rican, but he'll go to the Saint Patrick's Day Parade and he'll even wear green, a flower.

F. Shamrock.

M. Now that's what I hold contempt for him, that's why.

R. Let's say someone like George, right. He knows Spanish better than you do, better than I do. In other words he should feel contempt toward us because since we were brought up under similar... No, no I'm not saying you do, but since he was brought up under similar circumstances we should know just as much Spanish as he does. What you're saying is because this boy was brought up similar to what you've been brought up he should know Spanish also and should do everything you do.

M. No, but he, but some of these forget their culture completely. Some of these people forget their culture completely.

R. You've forgotten a lot.

M. Ah, but not enough. I still have the the language.

T. I think if you're really proud of your culture and if you really have feeling for it and you see, and you see that another person is of the same culture, that you're from, but he hasn't, he's lost his culture, you feel in part resentful, because you feel that he's letting something die, and you'd like to hold on to your culture. But I guess that when you feel resentment toward him this is because you feel your culture is dying and you want to hold on to it.

F. It's not just that he's forgetting it. But that he's forgetting it helps the whole thing die.

T. Yes, I think you want to hold on to your culture and a that's why you feel in part resentful because...

F. If there lot's of people that are forgetting it then it makes it more difficult for even the ones that remember it to continue to have this, is that what you feel?

T. Yes.

F. It's not just that you feel sorry for him, but you feel resentful because he's making it more difficult for you to continue your own culture.

T. Exactly.

F. Gil, you better speak up, Tom, give Gil a chance.

G. No, I just wanted to say that it's like a trend, I mean didn't the Italian and the Irish turn to lose their culture like and a it's like a trend I think. I think that's what happens with a people from another country, foreign countries come here, they steadily, but surely start losing. Doesn't it happen?

M. No, the Irish they still have the Irish Day Parade.

G. Oh all right.

M. The Italian, they still hold their festival.

G. But that's tradition, that's tradition, but go into the deeper tradition, the culture.

M. Well, that's what I'm talking about.

G. Aren't they all, what do they associate themselves as?

M. But they haven't forgotten. But when you talk about an Irish, well you say, let me see, what has an Irish guy done, police force. They'll say, Irish and the police force, right? The Negroes... athletes. What the heck are Puerto Ricans? Did you ever think of it that way.

G. We haven't been here that long.

M. Well, all right.

G. To decide what we're gonna do.

M. All right, but I I'm trying to tell you that that I don't want to lose our culture and I'm only about 1/4-1/3 Puerto Rican and yet I'm proud of it. I'm not saying that we want to lose our culture, but steadily we do because it just happens, it just happens, it's repeated time and time again with different ethnic groups.

F. But what could you do about it, do you think. Anything you could do about it?

G. The only thing you can do is, I think, is the parents; parents influence the child because that's the only way you can do it. I don't think there's any other way. I think the basic, the root of it is with the parent. If the parent wants his child to know Spanish, be bilingual or whatever, then...(laughter) I mean, I might want my children to know three languages because I know three, I try to know three languages.

F. What's the third one?

R. French. But I think the basis of the problem is with the parent. I think the parent wants his child to know a Spanish then the child shall know Spanish.

R. But you said it's the job of the parent, but isn't it in a way like the whole society that, the whole American concept is that they don't want you to be different really, they want you to be the same as everyone else. Like they don't want you to hold on to your Spanish culture more or less. They want you to become Americanized.

T. Well, who's this, who's this?

R. Society in general you know they...

T. Oh, I see.

M. You mean you want to be an American, a pure American. What is an American. Isn't an American an international thing actually. During the beginning when the United States was first discovered there was the Dutch, the English, the French and the Spanish. That's the Americans. Now if you wanna say American I think that there should be a Cherokee running the the United United States, see.

T. One thing, when just Ramón just now said that society wants you to lose your culture and you know assimilate and all. This has in part become a past tense, because twenty or ten twenty years ago you found that people believed in a the melting pot and then you had a sociologist and everyone discarding this theory. What you have is really a lost conglomeration of ethnic groups living together so I feel that the society as a whole discards the melting pot, that they'll be more tolerant to the other, the culture of another person. They'll realize that in order to be an American you don't have to discard your own culture, that you can contribute what you have, the good, the positive aspects of your culture. You can contribute these things to society as a whole so that what Ramón says is only in part true. The people are becoming more aware of the fact that they can accept, that they're more tolerant, cause this is the way they've been orientated.

F. Tom, can I ask you something. Do you think Aspira does enough for Spanish, for the maintenance of Spanish.

T. Of the language, well, I feel that Aspira does as much as it can for its members.

F. For its members, what I mean for the language.

T. Right, in a way it does, because a you find that when you have a meeting you have all Aspirantes that know that this is a Puerto Rican organization and they'll speak at some of these meetings and you'll find many members of the...

F. I've never heard you speak any Spanish at all the meetings I've been to.

R. Does Aspira do enough to make sure that the kids know Spanish?

T. Well, not actually. They just do something in the way of instilling some sort of pride in the language.

F. They do?

T. Right, because a lot of their program, the cultural programs, for instance we had a program a last month. We had a Puerto Rican theatrical group who performed, you know sang in Spanish, spoke in Spanish and this is the type of program that they promote, so that it's not not so much you know a promoting "learn Spanish", it's just, it's doing a pride in yourself in the language.

F. If you did at the club what I did to you today, where you started talking in Spanish and you encouraged everybody else at the meeting to continue to talk in Spanish? Would that be outlandish?

T. I think I'll get a topic I think I'll try that one of these days. I'll get a topic where we can speak in Spanish and see just how it goes.

Part III

SOCIOLOGICALLY-ORIENTED STUDIES

Chapter
III-1-a

A SOCIOLINGUISTIC CENSUS OF A BILINGUAL NEIGHBORHOOD[1]

Joshua A. Fishman

INTRODUCTION

Language censuses have traditionally been criticized for their low reliability and their unproven validity.[2] More recently they have also been criticized for their lack of sociological contextualization.[3] Most language censuses have asked too few questions as well as questions that did not seek to determine the functional allocation of the languages available to populations marked by widespread and relatively stable bilingualism. In such populations it is the societal role of L_1 and L_2 (mother tongue and other tongue) that is of greatest significance rather than the mere aggregation of individual data concerning differential frequency or capacity of use in an overall uncontextualized sense.

The census here reported represents an attempt to utilize sociolinguistic theory in the measurement and description of bilingualism in a two block Puerto Rican neighborhood in Jersey City, New Jersey. In addition to the census data obtained on virtually the entire population living in these two blocks various psychological, linguistic and other sociological measures were also obtained on samples of this population. The intercorrelations between these several measures--most of which required active language use--will be separately examined to provide some indications as to the validity of the census "self reports" obtained.[4]

SELECTED DEMOGRAPHIC CHARACTERISTICS

Ninety Puerto Rican households were identified with the aid of long-term local residents in the neighborhood selected for study. Eighty-six households cooperated with the census takers.[5] The cooperating households contained 431 individuals. It is estimated that an additional 8 individuals constituted the remaining four households. Table 1 reveals the post-coded distributions obtained for the study population on eight examined demographic variables, as well as the agreement of response for each variable upon re-questioning 20% of all households one month later.[6]

The demographic characteristics of the studied population seem to be quite similar to those of Puerto Ricans in the Greater New York City area as a whole:[7] predominantly young; largely American born or born in smaller towns in Puerto Rico; predominantly unskilled workers; mostly of little formal education; mostly of low occupational status; etc. The census-recensus agreements on such items are invariably high.

DESIGN OF LANGUAGE QUESTIONS

The language questions asked followed the recommendations of the 1964 SSRC Sociolinguistics Seminar at Indiana University.[8] These questions deal separately with understanding, speaking, reading and writing. Each of these "performances" is separately reviewed in three ways: developmentally (e.g., "In which language did you speak conversationally first?"), currently ("Can you now hold a conversation in _______?") and

TABLE 1

EIGHT DEMOGRAPHIC VARIABLES: DISTRIBUTIONS AND RECENSUS AGREEMENTS

Variable	Distribution	Agreement
1. Sex	Male: 50.6%; Female: 49.4%	98%
2. Age	six or less: 28.3%; 7-12: 21.6%; 13-18: 11.1%; 19-24: 9.0%; 25-34: 14.8%; 35-44: 9.5%; 45-54: 4.2%; 55-64: 1.4%; 65 or over: none.	95%
3. Birthplace	U.S.A: 42.2%; San Juan or some section thereof: 9.5%; PR cities of 10,000 or larger: 13.9%; Smaller PR towns or rural areas: 33.1%; No response or unknown: 1.2%.	97%
4. Occupation	Operative, service worker, laborer, welfare: 20.4%; craftsman, foreman or blue collar: 6.5%; self-employed, white collar (sec'y., salesman), sub-professional: 2.5%; professional, manager, college student: 1.2%; housewife: 10.2%; minors (age 18 and below, unless working and not in school): 59.2%; NR or unknown: none.	88%
5. Education	none: 1.4%; elementary (1-6): 32.5%; secondary (7-12): 32.5%; college: 1.2%; graduate school: none; NR, unknown or below school age: 32.5%.	84%
6. Years in U.S.A.	less than 1: 3.9%; 1-2: 5.3%; 3-5: 7.9%; 6-10: 16.9%; 11-20: 20.2%; 20 and over: 2.1%; U.S. born: 42.2%; NR or unknown: 1.5%.	90%
7. Years in Jersey City	less than 1: 16.5%; 1-2: 20.9%; 3-5: 19.3%; 6-10: 31.1%; 11-20: 10.4%; 20 and over: .2%; NR or unknown: 1.6%.	93%
8. Years at present address	less than 1: 54.3%; 1-2: 29.2%; 3-5: 12.5%; 6-10: 3.0%; 11-20: .9%; 20 and over: none; NR or unknown: none.	84%

in terms of relative frequency ("What language do you most frequently use for conversations?"). In addition, most "performances" are separately reviewed in the context of home use, work use, and religious use. Finally, a single educational-instruction item and a single language preference item are included. No self-ratings of adequacy or competence were requested in view of the suspected low validity and directional bias of the replies to such questions on the part of linguistically untrained and socially insecure individuals. However, when self-ratings of adequacy were volunteered they were accepted provided they corresponded to qualifications of "yes" or "no" on questions of current performance.

RESULTS

Marginals

Table 2 reveals the replies obtained to the 23 language items that constituted the census schedule.[9] The general picture derived from these replies is that of a speech community in which oral Spanish is claimed to be the first language learned (items 9 and 10) and where it remains the predominant language of face to face interaction, not only at home (item 13) but at work (item 16) and in church (items 21, 22, 23) as well. Oral English is most frequently claimed in association with conversational preference (item 20), school instruction (item 19), and church or religious use (items 21, 22, 23), but in none of these contexts is it claimed more than two-thirds as frequently as is Spanish.

With respect to literacy the picture is somewhat different. As an ability ("can...") English and Spanish literacy are claimed with

TABLE 2

LANGUAGE CENSUS: MARGINALS (n = 431)

Item	Yes*	Little*	No*	NP*	r_{12}
1. Can Understand Spanish conversation?	779	135	019	067	80
2. Can Speak Spanish (conversation)?	833	077	016	074	83
3. Can Read newspapers/books in Spanish?	397	049	318	237	84
4. Can Write letters in Spanish?	390	030	339	241	86
5. Can Understand English conversation?	571	176	183	070	83
6. Can Speak English (conversation)?	536	181	216	067	83
7. Can Read newspapers/books in English?	455	130	206	209	83
8. Can Write letters in English?	387	063	327	223	81
	Span*	Eng*	Both*	NP*	
9. First language understood (conversation)?	886	002	039	072	50
10. First language spoken (conversation)?	884	---	023	093	50
11. First language read (newspapers/books)?	401	---	297	302	92
12. First language written (letters)?	383	002	276	339	90
13. Most frequently spoken at home?	657	088	183	072	57
14. Most frequently read at home?	267	051	357	325	85
15. Most frequently written at home?	339	014	255	392	93
16. Most frequently spoken with fellow workers?	137	049	137	677	84
17. Most frequently spoken with supervisor?	046	009	264	680	57
18. Most frequently spoken with clients/custs?	032	014	035	919	79
19. Language of instruction in school?	339	237	167	257	79
20. Language liked most (conversation)?	362	285	186	167	61
21. Language of priest's/minister's sermon?	452	137	193	206	46
22. Language of silent prayer?	469	123	151	257	75
23. Language of church service?	427	160	193	220	48

*carried to 3 places, decimals omitted

almost equal frequency (items 3, 4 and 7, 8). This is due to the fact that Spanish literacy is claimed for less than half of those for whom oral Spanish competence is claimed whereas the discrepancy between claimed oral competence and claimed literacy is far less for English. Spanish literacy is more widely claimed than English literacy (items 14 and 15), and is most frequently claimed prior to English literacy (items 11 and 12). Nevertheless, the proportions claiming simultaneous literacy in English and in Spanish are very high. Indeed, reading both English and Spanish "most frequently" at home is claimed more often than is reading Spanish alone "most frequently" at home.

All in all, Spanish-claiming is most associated with home and with oral use, whether viewed developmentally, currently or in terms of relative frequency. English, on the other hand, while it has not displaced the primacy of Spanish in any way, is itself most claimed in association with current literacy in the home and with school (and to a lesser degree also religious) use. The high rate of claimed biliteracy may also be taken as a sign of the lack of an oral-literate distinction for English claims such as exists for Spanish claims.

The census-recensus item correlations[10] shown in Table 2 indicate, by and large, a quite acceptable level of reliability. The correlations are lowest for first language understood, for language most frequently spoken at home and with supervisor, for language liked most and for language of church sermon and service. Literacy items and capacity items ("can [you]...") reveal the highest census-recensus reliability. The median census-recensus item correlation is .81. An examination of changes in response from census to recensus most frequently indicates a shift to more "Spanish" or "both" claiming responses.[11]

R Factors

A verimax orthogonal rotation solution to the intercorrelations between all items listed in Table 2 yielded the five factors shown in Table 3.

From the point of view of macro-sociolinguistic theory[12] one would expect factors to be closely related to the major societal institutions (family, school, work-sphere, religion, etc.) in any society marked by relatively stable and widespread bilingualism. However, the functional differentiation of codes which marks such societies must not only cope with the major societal institutions or domains but must also cope with the differentiation between oral and written use of language. Diglossic societies[13]--i.e., societies marked not so much by individual bilingualism for intergroup purposes but by societal bilingualism for intragroup purposes--have commonly been found to reserve only one of the varieties or languages constituting their code-matrix for written use and for the greater formality of legal, governmental, religious and educational uses with which literacy is associated. Factor analysis is one technique--previously unutilized in the analyses of language censuses[14]--that can enable us to discover the functional interrelation between the oral-literate differentiation on the one hand and the institutional differentiation on the other.

Table 3 reveals the very interrelation between literacy and social institutions that recent sociolinguistic theory has led us to expect. The first three factors all pertain primarily to the home domain, the fourth, to work and the fifth, to religion. The predominant role of

TABLE 3

FACTORS AND ITEM LOADINGS DERIVED FROM LANGUAGE CENSUS DATA

No.	Suggested factor name	Items (Loadings)
I	Spanish: Literacy	4(93), 3(92), 15(89), 12(88), 11(87), 19(71), 14(70), 20(54)
II	English (oral and written)	7(89), 6(88), 5(84), 8(82)
III	Spanish: oral	9(78), 1(71), 2(66), 10(63), 13(38)
IV	Spanish: at work	18(79), 16(73), 17(55)
V	Spanish: in religion	21(93), 23(89), 22(40)

Spanish in the community under study is indicated by the larger number and diversity of the Spanish factors. English is still largely undifferentiated. Oral English and written English tend to be claimed for the same individuals. English-claiming is relatively unpredictable from claims for Spanish literacy or from claims for any other Spanish factor. English and Spanish are not claimed at each other's expense. They are separately claimed rather than displacively claimed.

Spanish itself is functionally differentiated. Claims re oral use of Spanish (Factor III) are quite separate from and not predictive of claims re literate use of Spanish (Factor I). Similarly, claims re use of Spanish in religion (Factor V) are quite separate from and not predictive of claims re use of Spanish at work (Factor IV). As might be expected under these circumstances instructional (school) experience with Spanish (item 19) is imbedded in Spanish literacy more generally. Less expected, perhaps, is the fact that the preferential use of Spanish for conversations (item 20) is also related to Spanish literacy rather than to oral Spanish. This may be indicative of the fact that those individuals who become ideologized with respect to language, i.e., those who become "language loyalists" and for whom Spanish is symbolic of Puerto Rican group identity rather than being merely a natural ingredient of everyday life,[15] also are those who tend to become or to have become literate in Spanish.

Q Factors

Just as R factors reduce the matrix of inter-item correlations so Q factors--hitherto unused in language census studies--reduce the number of inter-person correlations.[16] Q factors help us answer the question: how many "differently performing" sub-populations or networks are there in the bilingual speech community under study? The fact that diglossic speech communities reveal marked functional differentiations in their code matrix should not lead us to assume that all segments of any speech community necessarily have equal access to all of the available codes or make identical functional differentiations between them. Q factors help identify behaviorally different segments of the speech community--in our case, "claimingly" different sub-populations or networks in so far as the questions of the language census are concerned.

Five Q groups were differentiated on the basis of the initial census replies. That the Q classification was essentially a reliable one for the kind of data at hand is indicated by the fact that 94% of the 124 individuals in our re-interview sample were classified in the same Q group on the basis of the re-interview returns available for them.[17]

Factor Differences between Q Groups

Table 4 presents the average scores for individuals in each of the five Q groups on the two highest loading items in each factor. A review of the differences between the Q groups on these ten items can serve as a short-cut in our efforts to determine in what ways the five clusters of individuals differ in so far as their language-census claims are concerned.[18]

The two most noticeably different groups are Q_I and Q_{II}. Although both score relatively low on Spanish at Work (Factor IV) they differ substantially on all other factors. Q_I consists of relatively high-

TABLE 4

FACTOR DIFFERENCES BETWEEN Q GROUPS

			Q Groups					
Item	Factor	$\bar{x}$/s	I	II	III	IV	V	Total
4	I	$\bar{x}$	1.98	.43	1.75	1.23	.41	1.07
		s	.12	.78	.65	.96	.82	.98
3	I	$\bar{x}$	1.98	.50	1.75	1.24	.49	1.10
		s	.12	.80	.65	.95	.85	.96
7	II	$\bar{x}$	1.70	1.83	1.68	.47	1.21	1.31
		s	.61	.42	.67	.66	.97	.86
6	II	$\bar{x}$	1.58	1.97	1.70	.63	1.49	1.34
		s	.71	.21	.53	.65	.86	.83
9	III	$\bar{x}$	2.00	1.72	2.00	2.00	2.00	1.91
		s	--	.69	--	--	--	.41
1	III	$\bar{x}$	2.00	1.68	1.94	1.90	1.66	1.82
		s	--	.52	.24	.30	.56	.44
18	IV	$\bar{x}$	.50	.50	1.00	1.80	1.00	.97
		s	.76	.58	1.00	.63	1.41	.92
16	IV	$\bar{x}$	.52	.00	1.21	1.70	1.60	1.00
		s	.71	--	.98	.66	.89	.92
21	V	$\bar{x}$	1.85	.83	.39	1.67	1.91	1.33
		s	.44	.83	.66	.66	.29	.85
23	V	$\bar{x}$	1.77	.80	.41	1.63	1.91	1.30
		s	.52	.79	.66	.69	.29	.84
Total n[19]			73	110	34	121	47	431

claiming individuals on Spanish Literacy (Factor I), on Oral Spanish (Factor III) and on Spanish in Religion (Factor V), whereas Q_{II} consists of low-claiming individuals in each of these connections. Finally, Q_I individuals make intermediate claims with respect to English (Factor II) whereas Q_{II} individuals stand highest in their claims in this respect.

The individuals in Q groups III, IV and V differ less sharply from each other but, nevertheless, there is something unique about each group. Thus Q_{III} is rather similar to Q_{II} on the whole but is appreciably lower on Spanish in Religion (Factor V) while being higher on Spanish at Work (Factor IV). Q_{IV} individuals are noteworthy in that they make the most meager claims for English (Factor II) but the most substantial claims for Spanish at Work (Factor IV). Q_V individuals make very modest claims for either Spanish or English in the home context but make relatively high claims for Spanish at Work (Factor IV) and in Religion (Factor V).

Demographic Differences between Q Groups

Further clarification of the differential language-claiming behavior of the Q groups may be obtained by viewing them in demographic perspective (Table 5). Q groups I and III are primarily composed of heads of households; groups II and V are primarily composed of minor children; and group IV is composed of almost equal proportions of heads of households and of minor children. This simple difference in group composition alone helps explain the higher Spanish literacy (Factor I) of groups I and III.

Although Q groups I and III are rather similar in composition vis-a-vis family role they nevertheless differ markedly in other

TABLE 5

DEMOGRAPHIC DIFFERENCES BETWEEN Q GROUPS

Demographic Item	Q_{I}	Q_{II}	Q_{III}	Q_{IV}	Q_{V}
7-1 Male head of household	43.8%	2.7%	23.5%	19.0%	6.4%
-2 Female head of household	34.2	5.4	32.4	26.4	6.4
-3 Minor offspring	10.9	60.0	26.5	43.0	61.7
13-1 One generation household	13.7	.9	5.9	8.3	4.3
-3 Three generation household	9.6	3.6	5.9	3.3	8.5
19-1 Sex: male	58.9	52.7	44.1	38.8	61.7
20 Age: median yrs.	30 yrs.	11 yrs.	28 yrs.	20 yrs.	10 yrs.
21-1 Birthplace: U.S.A.	9.6%	59.1%	17.6%	32.2%	57.4%
-2 : San Juan	6.8	14.6	11.8	9.9	6.4
-3 : Other cities	21.9	5.4	23.5	16.5	17.0
-4 : Towns & rural	61.6	20.0	41.2	40.5	17.0
22-1 Occupation: Operative or unemployed	48.0	7.3	38.2	23.1	8.5
-2 : Craftsman	20.6	----	11.8	6.6	2.1
-3 : White Collar or profes.	4.1	4.6	11.8	2.5	2.1
-4 : Housewife	12.3	3.6	11.8	20.7	4.3
24-B Education: NP	15.1	13.6	14.7	36.4	40.4
-1 : none	----	----	----	5.0	----
-2 : elem.	26.0	52.7	17.6	33.0	36.2
-3 : secondary and higher	58.9	33.6	67.6	25.6	23.4
25-1, 2 Recency of arrival: two years or less	11.0	.9	11.8	17.4	4.2
-5, 6 Recency of arrival: eleven years or more	57.5	14.5	38.2	17.4	8.5
18-2, 3, 4 Occupation of head of household: crafts. + white collar + profes.	34.2	31.8	47.1	28.9	14.9
Total n	73	110	34	121	47

important respects. Group I members more frequently live in one-generation households (i.e., households with adults only), they are more frequently males, they tend to be somewhat older, they are less frequently American born and more frequently of Puerto Rican small town or rural origin than are the members of Q group III. These characteristics tend to clarify the higher level of Spanish-claiming for Q_I individuals at home (Factors I and III) and in religion (Factor V). On the other hand Q_{III} members tend more frequently to have white collar occupations, more frequently to have received secondary education, and more frequently to be members of households whose head member has progressed beyond the occupational level of unskilled operative. These characteristics tend to clarify the slightly higher level of English-claiming (Factor II) for Q_{III} individuals as well as their appreciably higher level of claiming to use Spanish at work (Factor IV). Although they use Spanish less frequently at home and in religion than do Q_I individuals Q_{III} individuals seem to have the background that enables them to find positions in which their knowledge of both Spanish and English can be functional for themselves and their co-workers.

Q groups II and V, though both composed largely of minors, also differ consistently in ways that appear to clarify the factor differences that have been observed to obtain between them. Q_{II} individuals have more frequently obtained elementary and secondary or higher education, they have lived in the continental U.S.A. for more years, and they are more frequently members of households whose head member has progressed beyond the unskilled operative level of occupation. These background characteristics seem to explain why Q_{II} individuals are somewhat less Spanish-claiming in terms of Oral use (Factor III) and appreciably less Spanish-claiming with respect to Work use (Factor IV) and Religious use (Factor V). On the other hand Q_{II} individuals are slightly more Spanish-claiming in terms of Literacy (Factor I) and appreciably more English-claiming (Factor II). Indeed, Q_{II} individuals are the most English-claiming and least Spanish-claiming in our population as a whole. All in all, the differences between Q_{II} and Q_V individuals may be indicative of the differences between youngsters who are "making it" and those who are not, between those youngsters who are moving toward increasing interaction with general American speech networks (and behavior and value networks as well) and those who are more inwardly oriented toward the behavioral and linguistic styles of the Puerto Rican neighborhood.

Finally we come to Q_{IV} individuals. As mentioned above this is the only group composed of equally major proportions of both adults and children. As a result, it tends to occupy an intermediate position on most demographic variables between those groups composed largely of adults (Q_I and Q_{III}) and those composed largely of minors (Q_{II} and Q_V). It is more one-sided (rather than intermediate) on certain variables, however, and these may be thought of as typifying this cluster of individuals. Q_{IV} members are more frequently female; more frequently housewives; frequently of meager educational attainment and most frequently recently arrived in the continental U.S.A. These characteristics may help explain why Q_{IV} individuals are least English-claiming (Factor II) on the one hand and most Spanish-claiming in the domain of Work (Factor IV) on the other hand while remaining intermediate on Spanish Literacy, Oral Spanish and Spanish in Religion (Factors I, III and V).

On the whole this cluster of individuals may be considered to represent those adults and children--largely female--who are expected to be most sheltered from American interactions outside of the home and neighborhood and from English usage within it.

Analyses of Variance

R and Q factors are both emic[20] approaches to data analysis. The analysis of variance, on the other hand, is an etic approach in that it is interested in possible differences between previously delineated variables rather than in functional groupings (of behaviors, of individuals) that "naturally" derive from the data or are extracted from it on a post-hoc empirical basis. Language census data--like all census data--has most frequently been subjected to etic analyses since such analyses are obviously more suitable for the large number of analyses (across time and across sub-populations) to which such data is frequently subjected. The present study was fortunate to be able to utilize both approaches and, therefore, able to benefit from the assets of both as well as able to suggest the extent to which their respective findings are complementary.

Four demographic variables were selected (as "between group" main effects) and their relationship to variance in factor scores was examined in Factors I, II and III (for which largest Ns were available). Two of these variables represent individual characteristics: age and birthplace. The remaining two represent household characteristics: generational range and occupation of head of household (male head, where both male and female heads exist). The type of analysis of variance utilized was that which proceeds via regression analysis.

This approach not only yields an exact solution but--unlike the traditional analysis of variance--also indicates the cumulative and incremental values of the variables under study.[21]

Tables 6 and 7 reveal that Factor I (Spanish literacy) and Factor III (Oral Spanish) are significantly related to the same set of main effects and interactions. However, in the case of Factor I these variables produce a cumulative multiple R of .712 whereas with respect to Factor III they are somewhat less appropriate predictors, yielding a cumulative multiple R of only .407. For both factors the best single predictors (in terms of zero order r's) are the interaction between age and generational range,[22] followed closely by birthplace. Note however that with respect to Spanish literacy the interaction between a respondent's age and the generational range of his household also has incremental significance (even after all four main effects have been included in the multiple prediction), yielding a $F_{\Delta R}2$ of 16.1, whereas this interaction has no such incremental value for Factor III.[23] Young people are more likely to have Spanish literacy and oral Spanish claimed for them if grandparents are present in the household but these claims have incremental significance only for Spanish literacy.

Turning now to Factor II (English) we find a substantially different story (Table 8). Only one of our original four predictors is clearly effective (age, with an F_R2 of 50.5), one is marginally effective (birthplace), while the other two (both of the household variables) are of no significance at all. Although the incremental value of the interaction between age and generational range is substantial ($F_{\Delta R}2 = 12.8$) the incremental value of adding another main effect, education, is obviously even greater. With the addition of education as a predictor the multiple R obtained for Factor II rises to .632.

TABLE 6

ANALYSIS OF VARIANCE VIA REGRESSION ANALYSIS OF FACTOR I SCORES (N=385)

Variables	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
Age: Scale 1-5 Quadratic	.554 .164	.571	.326	.571	.326	90.6	---	---
BP	.530	.530	.281	.635	.403	147.9	.067	41.9
GR: Scale 1-3 (1+3) vs. 2	-.113 .218	.260	.067	.648	.420	3.5	.017	5.7
Occ: HW vs. WC vs. Oper HW vs. Oper vs. WC	.100 .180	.194	.038	.666	.444	7.6	.024	.8
Age x GR: Aspect 1 Aspect 2 Aspect 3	-.231 .457 -.607	.620	.384	.712	.507	80.0	.063	16.1
Age + BP + (Age x GR)	---	.705	.497	.705	.497	63.8	.094	23.5*
Total Main Effects + (Age x GR)	---	.712	.507	.712	.507	39.0	.063	1.7**

* Δ from Age + BP

** Δ from Age + BP + (Age x GR)

TABLE 7

ANALYSIS OF VARIANCE VIA REGRESSION ANALYSIS OF FACTOR III SCORES (N=413)

Variables	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
Age: Scale 1-5 Quadratic	.262 .055	.271	.073	.271	.073	13.8	---	---
BP	.315	.315	.099	.345	.119	45.0	.036	16.4
GR: Scale 1-3 (1+3) vs. 2	-.015 .186	.185	.034	.375	.141	7.4	.022	5.2
Occ: HW vs. WC vs. Oper HW vs. Oper vs. WC	.164 .023	.164	.027	.407	.165	5.6	.024	5.7
Age x GR: Aspect 1 Aspect 2 Aspect 3	-.087 .194 -.327	.328	.108	.407	.165	17.9	.000	0.0
Age + BP + (Age x GR)	---	.399	.159	.399	.159	12.6	.040	6.3*
All Main Effects + (Age x GR)	---	.407	.165	.407	.165	7.8	.006	0.7**

*Δ from Age + BP

**Δ from Age + BP + (Age x GR)

TABLE 8

ANALYSIS OF VARIANCE VIA REGRESSION ANALYSIS OF FACTOR II SCORES (N=406)

Variables	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
Age: Scale 1-5	.167	.450	.202	.450	.202	50.5		
Quadratic	-.424							
BP	.093	.093	.009	.465	.216	3.6	.014	7.0
GR: Scale 1-3	-.058	.067	.004	.465	.216	0.8	.000	.000
(1+3) vs. 2	-.030							
Occ: HW vs. WC vs. Oper	.061	.087	.008	.469	.220	1.6	.004	1.0
HW vs. Oper vs. WC	.072							
Age x GR: Aspect 1	-.009	.050	.002	.538	.289	0.2	.069	12.8
Aspect 2	-.008							
Aspect 3	.036							
Age + BP + (Age x GR)	---	.522	.272	.522	.272	25.2	.056	10.4*
Four Main Effects + (Age x GR)	---	.538	.289	.538	.289	16.1	.017	2.4**
Educ: none vs. elem vs. second	.500	.520	.270	.579	.335	75.0	---	---
other vs. second	.116							
Age + BP + Educ	---	.579	.335	.579	.335	41.9	.119	35.0***
Total (Five Main Effects + Interact)	---	.632	.400	.632	.400	22.2	.111	37.0****

* Δ from Age + BP

** Δ from Age + BP + (Age x GR)

*** Δ from Age + BP

**** Δ from Four Main Effects + (Age x GR)

All in all the analyses of variance have enabled us to see that claims for Spanish literacy are most predictable and claims for oral Spanish, least predictable from the variables that we have selected as main effects, although each of these main effects is independently significant in most instances. Oral Spanish is claimed too widely in this speech community for variables other than birthplace to add much to its prediction. English and Spanish literacy, on the other hand, are less widely and more variably claimed. They are, therefore, more predictable from demographic variables. In both of the latter factors, therefore, there is also a significant incremental gain from considering the interaction between an individual's age and the generational composition of his household even after four other main effects have been utilized.[24] Finally, several of the very demographic variables that have helped us descriptively differentiate between emic Q groups (constructed in such fashion as to be maximally different in census-claiming behavior) have also been found to be significant etic dimensions in accounting for variance in factor scores.

SUMMARY

An intensive language census in a bilingual Puerto Rican neighborhood in Jersey City was found to yield reliable data, particularly for items dealing with demographic variables and literacy questions. The language questions yielded R factors which showed institutional separation (home, work, religion) as well as performance separation (speaking, reading-writing). Claiming patterns yielded Q factors which differentiated between socially less mobile and accomplished and socially more mobile and accomplished adults, between outwardly and inwardly oriented youngsters, and between all of the forgoing groups and housewives and their minor children. Analyses of variance of factor scores pertaining to Spanish literacy, oral Spanish, and English (oral and literate) indicated that whereas age, birthplace, generational range of household and occupation of head of household tended to be significant main effects in each instance their incremental and cumulative value, as well as that of the interaction between age and generational range, varied greatly from one factor to the next.

FOOTNOTES

1. The research reported in this paper was financed by the Language Research Section, Department of Health, Education and Welfare (Contract No. OEC-1-7-062817-0297). Data processing in connection with this research was supported by a grant from the College Entrance Examination Board.
2. For an early discussion of this problem and suggestions regarding improved language questions see Heniz Kloss, "Sprachtabellen als Grundlage für Sprachstatistik, Sprachenkarten und für eine allgemeine Sociologie der Sprachgemeinschaften," Vierteljahrschrift für Politik und Geschichte, I (1929), 103-117. Various subsequently formulated criticisms are reviewed in Lieberson's papers cited in footnote 3, below, as well as in "Appendix A: Methodological Notes" to my Language Loyalty in the United States (The Hague: Mouton, 1966), where pp. 419-422 are devoted to a discussion of reliability and validity of "U.S. Census Data on Mother Tongue."
3. See, e.g., Stanely Lieberson, "Language questions in censuses," Sociological Inquiry, XXXVI (1966), 262-279, and, by the same author, "How can we describe and measure the incidence of bilingualism," in William Mackey (ed.), The Description and Measurement of Bilingualism (Ottowa: Canadian National Commission for Unesco, 1967; Preprints of the International Seminar held at the University of Moncton, June 6-14, 1967, pp. 145-159).
4. See Joshua A. Fishman and Charles Terry, "The Contrastive Validity of Census Data on Bilingualism in a Puerto Rican Neighborhood," Chapter III-1-b in Joshua A. Fishman, Robert Cooper, Roxana Ma, *et al.*, Bilingualism

in the Barrio (Final Report for DHEW on Contract OEC-1-7-062817-0297) (New York: Yeshiva University, 1968).

5. In seeking the cooperation of local residents census-takers explained that the purpose of the census was to obtain information needed in order to help teachers improve English instruction and Spanish instruction for students studying either or both of these languages. In addition, a letter of introduction from a local Catholic priest (in Spanish) and a Spanish newspaper account of our project were also included in each census-taker's kit although these were rarely needed.
6. Households were defined as including all individuals who claimed to reside in the same apartment. A single respondent, normally the head of household or senior adult present, was asked to reply for the entire household. All census-takers spoke both English and Spanish with native fluency.
7. See Nathan Kantrowitz and Donnell M. Pappenfort, Social Statistics for Metropolitan New York (New York: Graduate School of Social Work, New York University, 1966); also U.S. Bureau of the Census, Part 1, New York City, PHC(1)-104, 1960.
8. These suggestions are incorporated (and tabularly presented) in Stanley Lieberson, "Language questions in censuses," Sociological Inquiry, XXXVI (1966), 262-279. The entire issue in which Lieberson's paper appears is entitled Explorations in Sociolinguistics and has been republished as Part II of International Journal of American Linguistics, XXXIII, no. 4 (1967).
9. The NP column also includes those individuals for whom household

respondents indicated that a particular question was "not pertinent." Thus, questions concerning understanding and speaking in the case of infants, questions concerning reading and writing for pre-schoolers or illiterates, questions concerning work for those who are housewives or usually unemployed, questions involving church attendance for those who do not go to church almost always elicited responses which were coded as NP.

10. Census-recensus item correlations (Pearsonian) were computed based upon the following scores for items 1-8: yes = 3, a little = 2, no = 1, not pertinent = 0. For items 9-23 the census-recensus item correlations were computed based upon the following scores: Spanish = 3, both = 2, English = 1, not pertinent = 0. The Pearson product moment correlation between the overall item means obtained on the basis of the above scores for the census-recensus population is .97.

11. The directionality of this shift may be in accord with greater awareness that our project represented a genuine interest in both languages rather than in English alone, as might have been initially suspected.

12. Joshua A. Fishman, "The description of societal bilingualism," in William Mackey (ed.), The Measurement and Description of Bilingualism (Ottowa: Canadian Commission for Unesco, 1968); also Joshua A. Fishman, "The relationship between micro- and macro-sociolinguistics in the study of who speaks what language to whom and when," in Dell Hymes and John J. Gumperz (eds.), The Ethnography of Communication: Directions in Sociolinguistics (New York: Holt, Rinehart and Winston, in press).

13. George C. Barker, "Social functions of language in a Mexican-American community," Acta Americana, V (1947), 185-202; Charles A. Ferguson, "Diglossia," Word, XV (1959), 325-340; Joshua A. Fishman, "Bilingualism with and without diglossia; diglossia with and without bilingualism," Journal of Social Issues, XXIII, no. 2 (1967), 29-38; John J. Gumperz, "Linguistic and social interaction in two communities," American Anthropologist, LXVI, part 2 (1964), 137-154; Wilhelm Mak, "Zweisprachigkeit und Mischmundart in Oberschlesien", Schlesisches Jahrbuch für deutsche Kulturarbeit, VII (1935), 41-52; Joan Rubin, "Bilingual usage in Paraguay," in Joshua A. Fishman (ed.), Readings in the Sociology of Language (The Hague: Mouton, 1968), pp. 512-530.

14. Most other language census studies have had to utilize data obtained from two or, at most, three language capacity or language use questions. As a result of the severely limited number of questions typically devoted to language in censuses that serve more general purposes factor analyses of the resulting language data have heretofore not been necessary. Given the growing interest in more exhaustive language censuses and language surveys, data-compositing techniques such as factor analyses may well become more widely used in the near future. For discussions of plans for intensive and extensive language censuses and language surveys see Bulletin of the Survey of Language Use and Language Teaching in East Africa (Nairobi, Kenya).

15. For discussions of language loyalty and of languages that come to be viewed as symbolic of group identity see Joshua A. Fishman,

Language Loyalty in the United States (The Hague: Mouton, 1966); Joshua A. Fishman, "Varieties of ethnicity and varieties of language consciousness," Monograph Series on Languages and Linguistics (Georgetown University), XVIII (1965), 69-79; Vladimir C. Nahirny and Joshua A. Fishman, "American immigrant groups: ethnic identification and the problem of generations," (British) Sociological Review, XIII (1965), 311-326.

16. Raymond B. Cattell, "The data box: its ordering of total resources in terms of possible relational systems," in Raymond B. Cattell (ed.), Handbook of Multivariate Experimental Psychology (Chicago: Rand McNally, 1966), pp. 67-128; Raymond B. Cattell, "The three basic factor-analytic research designs--their interrelations and derivatives," Psychological Bulletin, XLIX (1952), 499-520; Raymond B. Cattell, Malcolm A. Coulter, and Bien Tsujioka, "The taxonometric recognition of types and functional emergents," in Raymond B. Cattell (ed.), Handbook of Multivariate Experimental Psychology (Chicago: Rand McNally, 1966), pp. 288-329; Lee J. Cronbach, "Correlation between persons as a research tool," in O. Hobart Mowrer (ed.), Psychotherapy: Theory and Research (New York: Ronald Press, 1953), pp. 376-388.

17. The stability of Q group classification derives from the fact that it depends less on the stability of any individual item than on the overall performance profile of individuals across all items. For the 124 cases under consideration the following table reveals that it is primarily for Q group III--the numerically smallest Q group of the five--that a question of reliability of classification arises.

Interview Q Groups	Re-Interview Q Groups 0	I	II	III	IV	V	Total
0	6						6
I		17			1		18
II			41			2	43
III		3		6			9
IV					24		24
V			1		1	22	24
Total	6	20	42	6	26	24	124

Coefficient of Contingency = .90 (Maximum possible for a 6x6 table = .913).

Q_0 indicates (six) individuals in the interview-re-interview sample that were unassignable to any Q group due to insufficiency of data pertaining to them.

18. For the means of the five Q groups on each of the 23 items of the language census see Table I, Appendix III-1, in Joshua A. Fishman, Robert Cooper, Roxanna Ma, *et al.*, *Bilingualism in the Barrio* (Final Report to DHEW on Contract No. OEC-1-7-062817-0297) (New York: Yeshiva University, 1968). Appendix III-1 also contains a table of item intercorrelations for all 23 census items (Table II).

19. Forty-six individuals out of the total population of 431 were unassignable to any Q group due to insufficiency of data available for them.

20. The emic-etic distinction in sociolinguistics is based on an analogy to phon*emic*-phon*etic* analysis in linguistics proper. Phonemic analysis is concerned only with those sounds that are meaningfully contrasted by native speakers. Thus /b/ and /p/ represent a phonemic difference for native English speakers, as

in the difference between *bin* and *pin*. On the other hand, phonetic analysis is concerned with all sounds that are produced by speakers, whether meaningfully contrasted or not. Thus the [p] in *pin* and the [p] in *spin* do not sound different to linguistically untrained speakers of English, although the first is aspirated and the second is unaspirated. Since the contrast between aspirated and unaspirated [p] is *not* related to any differences in meaning on the part of English speakers it is a phon*etic* rather than a phon*emic* difference in English (whereas it is the reverse in Bengali). For further comments concerning the emic-etic distinction in linguistics see any introductory linguistics text such as Charles F. Hockett, *A Course in Modern Linguistics* (Revised) (New York: Macmillan, 1963). For further comments concerning the emic-etic distinction in sociolinguistics see Joshua A. Fishman, "Sociolinguistics," in Kurt Back (ed.), *Social Psychology* (New York: Wiley, in press).

21. The analysis of variance, whether via regression analysis or via more usual computational methods, has also not hitherto been utilized for the analysis of census-type data. This is certainly to be regretted since the analysis of variance is far superior to the usual inspectional methods that are limited to noting the directional consistency of percentages in cross-tabulated variables considered two at a time. Since references to traditional computational approaches to the analysis of variance are easily obtainable only the more novel approach via regression analysis need be referenced here. For theoretical, computational and substantive presentations see R. A. Bottenberg and J. H. Ward, Jr., *Applied*

Multiple Linear Regression, PRL-TDR-63-6 (Lackland, Texas: Lackland AF Base, 1963); Jack Cohen, "Some statistical issues in psychological research," in B. B. Wolmand (ed.), Handbook of Clinical Psychology (New York: McGraw-Hill, 1965), pp. 95-121; Jack Cohen, "Multiple regression as a general data-analytic system," Psychological Bulletin (in press); Jack Cohen, "Prognostic factors in functional psychosis: a study in multivariate methodology," Mimeographed, Invited Address at the New York Academy of Sciences, March 18, 1968.

22. Since not all of the theoretically possible age by generational range interactions actually occur (e.g., there are no children in one generation households) age was dichotomized (18 and younger, 19 and older) for the purposes of this analysis and only three aspects of the interaction in question were recognized, as follows:

Aspect 1: 19 and older in 2 or 3 generational households vs. 18 and younger in 2 or 3 generational households vs. 19 and older in 1 generational households (coded -1, 0, +1).

Aspect 2: 19 and older in 3 generational households vs. 19 and older in 1 generational households and 18 and younger in 2 or 3 generational households vs. 19 and older in 2 generational households (coded -1, 0, +1).

Aspect 3: 18 and younger in 3 generational households vs. 19 and older in 1, 2 or 3 generational households vs. 18 and younger in 2 generational households (coded +1, 0, -1).

23. Degrees of freedom are defined as follows in the analysis of variance via regression analysis:

$$\text{for } F_{R^2} = \frac{\text{numerator}}{\text{denominator}} = \frac{\underline{K(=\text{number of predictors})}}{n - K - 1}$$

$$\text{for } F_{\Delta R^2} = \frac{\text{numerator}}{\text{denominator}} = \frac{K_b(=\text{added number of predictors})}{n - K_a(=\text{prior total number of predictors } \underline{\text{before}} \text{ adding a new predictor}) - K_b - 1}$$

24. The interaction between age and generational range is discernible from the fact that mean scores on factors I and III show a dip for two generational households while mean scores on factor II reveal a peak for two generational households relative to one and three generational households. Although school age offspring obviously constitute the largest proportion in two generational households it is not clear from an examination of the above mentioned means whether the claims for offspring (age 18 and below) or the claims for adults (age 19 and above), or both sets of claims, are different in two generational families relative to one and three generational households. Separate analyses of variance reveal that while both the claims for adults and those for offspring differ by generational range on all three factors it is only in the case of the offspring that these differences attain significance.

APPENDIX III-1

-TABLE I-

CENSUS ITEMS BY Q GROUP: $n, \bar{x}, s$, AND $s_{\bar{x}}$

ITEM #		TOTAL	BLANK	Q ONE	Q TWO	Q THREE	Q FOUR	Q FIVE
1.	BASE	402	19	73	110	33	120	47
	MEAN	1.82	1.53	2.00	1.68	1.94	1.90	1.66
	SUM X	730	29	146	185	64	228	78
	SIGMA	.44	.77		.52	.24	.30	.56
	ST.ERROR	.02	.18		.05	.04	.03	.08
2.	BASE	399	16	73	109	33	121	47
	MEAN	1.88	1.63	2.00	1.85	1.94	1.91	1.74
	SUM X	751	26	146	202	64	231	82
	SIGMA	.37	.81		.36	.24	.34	.53
	ST.ERROR	.02	.20		.03	.04	.03	.08
3.	BASE	329	3	64	101	28	94	39
	MEAN	1.10		1.98	.50	1.75	1.24	.49
	SUM X	363		127	51	49	117	19
	SIGMA	.96		.12	.80	.65	.95	.85
	ST.ERROR	.05		.02	.08	.12	.10	.14
4.	BASE	327	2	64	101	28	93	39
	MEAN	1.07		1.98	.43	1.75	1.23	.41
	SUM X	349		127	43	49	114	16
	SIGMA	.98		.12	.78	.65	.96	.82
	ST.ERROR	.05		.02	.08	.12	.10	.13
5.	BASE	401	17	73	110	33	121	47
	MEAN	1.42	.35	1.63	1.97	1.79	.79	1.53
	SUM X	568	6	119	217	59	95	72
	SIGMA	.80	.79	.70	.21	.48	.69	.83
	ST.ERROR	.04	.19	.08	.02	.08	.06	.12
6.	BASE	402	18	73	110	33	121	47
	MEAN	1.34	.33	1.58	1.97	1.70	.63	1.49
	SUM X	540	6	115	217	56	76	70
	SIGMA	.83	.77	.71	.21	.53	.65	.86
	ST.ERROR	.04	.18	.08	.02	.09	.06	.12
7.	BASE	341	3	64	106	28	97	43
	MEAN	1.31		1.70	1.83	1.68	.47	1.21
	SUM X	448		109	194	47	46	52
	SIGMA	.86		.61	.42	.67	.66	.97
	ST.ERROR	.05		.08	.04	.13	.07	.15
8.	BASE	335	3	64	102	28	97	41
	MEAN	1.08		1.39	1.78	1.36	.08	1.07
	SUM X	361		89	182	38	8	44
	SIGMA	.96		.87	.54	.87	.34	.98
	ST.ERROR	.05		.11	.05	.16	.03	.15
9.	BASE	400	18	72	110	33	120	47
	MEAN	1.91	2.00	2.00	1.72	2.00	2.00	1.91
	SUM X	765	36	144	189	66	240	90
	SIGMA	.41			.69			.41
	ST.ERROR	.02			.07			.06

TABLE I (cont.)

ITEM #		TOTAL	BLANK	Q ONE	QTWO	QTHREE	QFOUR	QFIVE
10.	BASE	391	15	72	107	33	119	45
	MEAN	1.95	2.00	2.00	1.83	2.00	2.00	1.96
	SUM X	762	30	144	196	66	238	88
	SIGMA	.32			.56			.30
	ST.ERROR	.02			.05			.04
11.	BASE	301		64	104	27	76	30
	MEAN	1.15		1.91	.10	2.00	1.68	1.07
	SUM X	346		122	10	54	128	32
	SIGMA	.99		.43	.43		.73	1.01
	ST.ERROR	.06		.05	.04		.08	.19
12.	BASE	285		64	104	25	66	26
	MEAN	1.16		1.88	.13	2.00	1.85	1.00
	SUM X	331		120	13	50	122	26
	SIGMA	.99		.49	.48		.53	1.02
	ST.ERROR	.06		.06	.05		.07	.20
13	BASE	400	17	73	110	33	120	47
	MEAN	1.51	1.94	1.89	.85	1.67	1.94	1.09
	SUM X	604	33	138	94	55	233	51
	SIGMA	.80	.24	.39	.91	.60	.30	.95
	ST.ERROR	.04	.06	.05	.09	.10	.03	.14
14.	BASE	291		64	103	27	70	27
	MEAN	.87		1.30	.15	1.33	1.64	.11
	SUM X	252		83	15	36	115	3
	SIGMA	.95		.89	.47	.88	.76	.32
	ST.ERROR	.06		.11	.05	.17	.09	.06
15	BASE	262		61	95	26	62	18
	MEAN	1.14		1.85	.11	1.81	1.84	.78
	SUM X	298		113	10	47	114	14
	SIGMA	.98		.48	.42	.57	.55	1.00
	ST.ERROR	.06		.06	.04	.11	.07	.24
16	BASE	139		58	11	19	46	5
	MEAN	1.00		.52		1.21	1.70	1.60
	SUM X	139		30		23	78	8
	SIGMA	.92		.71		.98	.66	.89
	ST.ERROR	.08		.09		.22	.10	.40
17	BASE	138		58	11	17	47	5
	MEAN	.32		.07		.53	.60	.60
	SUM X	44		4		9	28	3
	SIGMA	.71		.37		.87	.90	.89
	ST.ERROR	.06		.05		.21	.13	.40
18.	BASE	35		14	4	5	10	2
	MEAN	.97		.50	.50	1.00	1.80	1.00
	SUM X	34		7	2	5	18	2
	SIGMA	.92		.76	.58	1.00	.63	1.41
	ST.ERROR	.16		.20	.29	.45	.20	1.00

TABLE I (cont)

ITEM#		TOTAL	BLANK	QONE	QTWO	QTHREE	QFOUR	QFIVE
19.	BASE	320	1	64	107	29	85	34
	MEAN	1.23	1.00	1.64	.57	1.72	1.68	1.00
	SUM X	394	1	105	61	50	143	34
	SIGMA	.79		.57	.60	.53	.62	.74
	ST.ERROR	.04		.07	.06	.10	.07	.13
20.	BASE	359	6	67	103	32	108	43
	MEAN	1.21	1.50	1.54	.65	1.34	1.55	1.07
	SUM X	435	9	103	67	43	167	46
	SIGMA	.78	.84	.70	.64	.75	.69	.70
	ST.ERROR	.04	.34	.09	.06	.13	.07	.11
21	BASE	337		67	109	33	94	34
	MEAN	1.33		1.85	.83	.39	1.67	1.91
	SUM X	449		124	90	13	157	65
	SIGMA	.85		.44	.83	.66	.66	.29
	ST.ERROR	.05		.05	.08	.11	.07	.05
22.	BASE	320		66	103	30	90	31
	MEAN	1.43		1.97	.62	1.67	1.81	1.61
	SUM X	457		130	64	50	163	50
	SIGMA	.81		.17	.72	.71	.49	.72
	ST.ERROR	.05		.02	.07	.13	.05	.13
23.	BASE	336		69	107	34	92	34
	MEAN	1.30		1.77	.80	.41	1.63	1.91
	SUM X	437		122	86	14	150	65
	SIGMA	.84		.52	.79	.66	.69	.29
	ST.ERROR	.05		.06	.08	.11	.07	.05

TABLE II

TABLE OF CORRELATIONS

VAR.	1	2	3	4	5	6	7	8	9	10
1	1.0000	.7258	.4379	.4265	.0749-	.0506-	.0661-	.1603-	.4386	.3006
2	.7258	1.0000	.3147	.3073	.0687	.0452	.0523	.0342-	.4487	.2118
3	.4379	.3147	1.0000	.9360	.0760-	.0538-	.0643	.0400-	.1944	.0982
4	.4265	.3073	.9360	1.0000	.0662-	.0463-	.0471	.0612-	.2266	.1474
5	.0749-	.0687	.0760-	.0662-	1.0000	.8752	.7185	.6581	.1556-	.1170-
6	.0506-	.0452	.0538-	.0463-	.8752	1.0000	.7631	.6989	.1536-	.1263-
7	.0661-	.0523	.0643	.0471	.7185	.7631	1.0000	.8071	.1154-	.0579-
8	.1603-	.0342-	.0400-	.0612-	.6581	.6989	.8071	1.0000	.1614-	.0968-
9	.4386	.4487	.1944	.2266	.1556-	.1536-	.1154-	.1614-	1.0000	.6968
10	.3006	.2118	.0982	.1474	.1170-	.1263-	.0579-	.0968-	.6968	1.0000
11	.4075	.3006	.7351	.7380	.3906-	.3425-	.2758-	.3787-	.2726	.2083
12	.4052	.3143	.7813	.7900	.4179-	.3933-	.3036-	.3966-	.2686	.1970
13	.4339	.2982	.3849	.4055	.3963-	.3960-	.2847-	.3841-	.3353	.2932
14	.3511	.2601	.6530	.6664	.4906-	.4862-	.4204-	.5219-	.2167	.1651
15	.4546	.3249	.8297	.8235	.4166-	.4002-	.3085-	.4212-	.2831	.2244
16	.0000	.0000	.0791-	.1077-	.3553-	.4337-	.3858-	.4701-	.0946	.0957
17	.0000	.0000	.1296-	.1060-	.2077-	.1838-	.1116-	.2297-	.0389	.0392
18	.0000	.0000	.2486	.2486	.1794-	.0211-	.1823	.2686-	.0000	.0000
19	.4117	.3582	.5789	.6152	.3935-	.3524-	.2515-	.3450-	.2790	.2187
20	.2586	.1918	.4370	.4647	.3199-	.3383-	.2291-	.3238-	.2033	.1332
21	.2438	.1366	.2762	.2695	.2420-	.2319-	.2087-	.2868-	.2075	.2033
22	.3840	.2004	.5131	.5296	.3401-	.3181-	.2905-	.3698-	.3352	.2697
23	.2085	.1241	.2587	.2500	.2320-	.2254-	.1992-	.2700-	.2011	.1989

TABLE II (cont.)

TABLE OF CORRELATIONS : CENSUS ITEMS

VAR.	11	12	13	14	15	16	17	18	19	20
1	.4075	.4052	.4339	.3511	.4546	.0000	.0000	.0000	.4117	.2586
2	.3006	.3143	.2982	.2601	.3249	.0000	.0000	.0000	.3582	.1918
3	.7351	.7813	.3849	.6530	.8297	.0791-	.1296-	.2486	.5789	.4370
4	.7380	.7900	.4055	.6664	.8235	.1077-	.1060-	.2486	.6152	.4647
5	.3906-	.4179-	.3963-	.4906-	.4166-	.3553-	.2077-	.1794-	.3935-	.3199-
6	.3425-	.3933-	.3960-	.4862-	.4002-	.4337-	.1838-	.0211-	.3524-	.3383-
7	.2758-	.3036-	.2847-	.4204-	.3085-	.3858-	.1116-	.1823	.2515-	.2291-
8	.3787-	.3966-	.3841-	.5219-	.4212-	.4701-	.2297-	.2686-	.3450-	.3238-
9	.2726	.2686	.3353	.2167	.2831	.0946	.0389	.0000	.2790	.2033
10	.2083	.1970	.2932	.1651	.2244	.0957	.0392	.0000	.2187	.1332
11	1.0000	.9404	.4950	.6655	.8780	.2989	.1236	.1143	.7313	.5345
12	.9404	1.0000	.5413	.6600	.8753	.2051	.1247	.1377	.7294	.5433
13	.4950	.5413	1.0000	.5068	.6405	.3134	.1012	.3073	.5172	.4395
14	.6655	.6600	.5068	1.0000	.7715	.4713	.2223	.2805	.6244	.4989
15	.8780	.8753	.6405	.7715	1.0000	.3420	.1569	.1977	.7191	.5934
16	.2989	.2051	.3134	.4713	.3420	1.0000	.3810	.6216	.2867	.1941
17	.1236	.1247	.1012	.2223	.1569	.3810	1.0000	.4493	.1332	.0795
18	.1143	.1377	.3073	.2805	.1977	.6216	.4493	1.0000	.5122	.1146
19	.7313	.7294	.5172	.6244	.7191	.2867	.1332	.5122	1.0000	.5806
20	.5345	.5433	.4395	.4989	.5934	.1941	.0795	.1146	.5806	1.0000
21	.3419	.3597	.3567	.3428	.3827	.0816	.0219	.3364	.3297	.3161
22	.6771	.6769	.5833	.6006	.7362	.3200	.1261	.3989	.6495	.4853
23	.3383	.3507	.3015	.3309	.3719	.1073	.0291	.3301	.3129	.2688

TABLE II (cont)

TABLE OF CORRELATIONS

VAR.	21	22	23
1	.2438	.3840	.2085
2	.1366	.2004	.1241
3	.2762	.5131	.2587
4	.2695	.5296	.2500
5	.2420-	.3401-	.2320-
6	.2319-	.3181-	.2254-
7	.2087-	.2905-	.1992-
8	.2868-	.3698-	.2700-
9	.2075	.3352	.2011
10	.2033	.2697	.1989
11	.3419	.6771	.3383
12	.3597	.6769	.3507
13	.3567	.5833	.3015
14	.3428	.6006	.3309
15	.3827	.7362	.3719
16	.0816	.3200	.1073
17	.0219	.1261	.0291
18	.3364	.3989	.3301
19	.3297	.6495	.3129
20	.3161	.4853	.2688
21	1.0000	.5250	.9703
22	.5250	1.0000	.4885
23	.9703	.4885	1.0000

Suplemento DIARIO

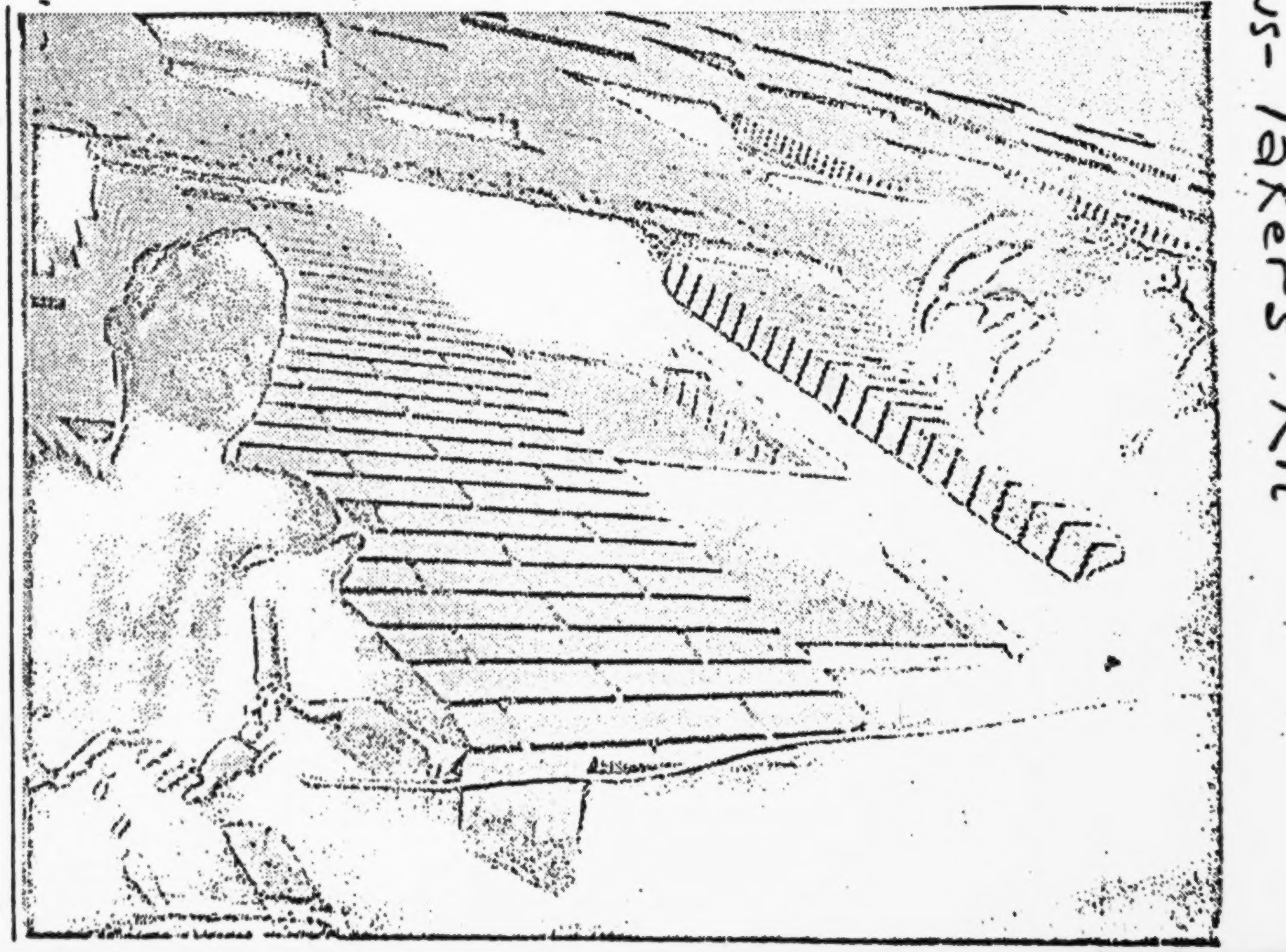
EL DIARIO
LA PRENSA

6/14/67

In Census-Taker's Kit

Profesores Universitarios de EU Viven con los Boricuas Para Estudiar Mejor Nuestro Idioma

Por VICTOR M. MANGUAL



Para los que gustamos de los productos agrícolas de nuestros países de origen, pedir un "aguacate" en una bodega es la cosa más natural. Como lo es también pedir una pasta de guayaba, un pollo, o cualquier otro producto que se nos antoje pedir o pronunciar.

Pero para muchos expertos en el idioma, que no ven cómo podemos pedir aguacate en vez de "avocado", y "guava paste" en vez de pasta de guayaba, y "chicken" en vez de pollo", todo ese bilingüismo no es otra cosa que "un fenómeno del idioma".

Y tanto interés y furor ha causado entre esos mismos profesores lingüísticos, y doctores en letras, que una de las más acreditadas universidades de Nueva York, la Yeshiva University, se ha dispuesto estudiar el asunto "sobre el mismo terreno".

A tales efectos, la Yeshiva University ha equipado con sistemas de comunicación electrónica a tres de sus más distinguidos profesores, para que éstos vayan a vivir a los mismos barrios y sectores poblados por puertorriqueños en particular, en uno de los sectores que más consternación causó por una de las tragedias que más ha conmovieron sus razones de más, para escoger aquel sector como su próximo vecindario.

EXPERTOS DEL IDIOMA

Son ellos, Jushua A. Fishman, profesor de Ciencias Sociales de la Universidad Yeshiva; el doctor Joseph Gomperz, profesor de Idiomas y antropología; y el doctor Robert Cooper, quien tiene un doctorado en psicología.

Los tres han alquilado un apartamiento en el mismo centro de la Calle 9, en Jersey City, y se hallan conviviendo con personas que en su gran mayoría vienen de los pueblos del centro de Puerto Rico, tales como Albonito, Barranquitas, Cayey y de otro pueblo de las montañas, San Sebastión del Pepino.

El trío de expertos tratará de ahondar en las causas que impulsan a los borincanos a hablar español; a hablar inglés y español mezclado, o a veces a hablar inglés solamente.

Su estudio del bilingüismo entre los nuestros cubrirá todas las fases como, por ejemplo, la pronunciación que le den los niños al idioma inglés; la que le den los adultos; la diferencia en pronunciación entre las mujeres y los hombres.

MEJOR PRONUNCIACION

vido nuestra comunidad: la muerte en un fuego de siete miembros de una familia, atrapados por las llamas y el humo.

En la tristemente notoria Calle 9, de Jersey City, New Jersey, irán a vivir tres profesores universitarios que tu-

Preguntas sobre quienes pronuncian mejor el inglés; quiénes hablan mejor el español; qué idioma prefieren hablar en sus casas; cuál prefieren hablar en las calles, cuando salen de compras, cuando las parejas salen a citas, y hasta en qué idioma prefieren rezar, • después que saben o aprenden el idioma inglés, serán contestados en las propias voces de los interrogados. Y esto es posible debido al moderno equipo electrónico, como cintas y máquinas grabadoras, discos, dictáfonos, y otros sistemas de comunicación, con que la Universidad ha provisto a sus tres profesores.

Es pues, una cosa corriente, que un ciudadano cualquiera pase por la Calle 9 y sus alrededores, allá en Jersey City, y vea a un chiquillo hablar a través de un micrófono, mientras más abajo, un hombre bien vestido, con todas las características de un profesor, sujeta a manera de una caja grabadora. Pues se trata sencillamente de uno de los tres doctores en letras hablando "de tú a tú" con un chiquillo, o con una viejecita, o con un oficinista, o un trabajador de factorías...

OBJETIVO

Qué puede lograrse con este estudio "fenomenal" del "fenómeno del bilingüismo", es cosa que todavía se ignora. Pero al decir del Rev. Padre Robert S. Call, director del Centro de Instrucción Intercultural de Jersey City (CANDO), y quien es uno de los sacerdotes católicos más ligados a la gran familia de puertorriqueños en Jersey City, todas las conversaciones y grabaciones que se hagan, así como todos los resultados de los exámenes que lleven a cabo estos tres profesores, pasarán a otro centro de la Universidad de Yeshiva.

Expertos en sonidos, idiomas, psicólogos, médicos y otros expertos, contestarán de allí todas las preguntas que tienen en mente no sólo estos profesores, y esta Universidad, sino quizás miles y miles de intelectuales y público en general que cree que el hispano, y en particular, el puertorriqueño, trata por todos medios de conservar su cultura, su herencia, su fisonomía de hispano, y sobre todo, su rico idioma.

RECOMENDACIONES

Si habrá de surgir de este estudio una que otras recomendaciones a los responsables de dirigir el sistema de enseñanza de Nueva York y quizás, en todas las grandes ciudades de Estados Unidos, es cosa que se ignora todavía.

6/14/67

EXCLUSIVO
EL DIARIO
LA PRENSA

Pues le toca ahora a los profesores Fishman, Gomperz y Cooper el no sólo buscar la forma de contestar todas preguntas que quizás nadie hasta ahora ha podido contestar acertadamente, sino que tendrán la oportunidad de hacer sus recomendaciones objetivas y claras sobre un "fenómeno" que realmente atañe a muchos.

BUENOS RESULTADOS

El Padre Call, quien habla, español fluentemente, y ha sido el responsable de que a través del Centro CANDO muchos bomberos, policías, y funcionarios de la ciudad, estén aprendiendo el idioma español, para poder así ofrecer un servicio más efectivo a la creciente comunidad de habla hispana, cree que el estudio en cuestión traerá buenos resultados, tanto para los compatriotas que han hecho de Jersey City, y otras ciudades de Estados Unidos su segundo hogar, como para las autoridades administrativas de cualquier ciudad donde haya residiendo hispanos.

Fue el Padre Call y varios amigos suyos pertenecientes a varias organizaciones de policías y bomberos de Jersey City, los que, con la colaboración de EL DIARIO-LA PRENSA, lograron que a principios de año se levantara un fondo de unos $9,000, con que se logró rehabilitar y ayudar a cerca de 150 personas que quedaron en la más completa miseria cuando un fuego de enormes proporciones les barrió con el edificio de seis pisos donde ellos vivían, y donde murieron siete puertorriqueños, incluyendo varios niñitos.

DE LAS MEJORES

Al decir del Padre Call, "esta comunidad puertorriqueña es a mi entender de las mejores que tenemos en Estados Unidos. Toda esta gente viene en su gran mayoría de los pueblos de Aibonito y Barranquitas. Son trabajadores que gozan de la estimación de toda la comunidad. A los mayores les gusta trabajar, y educar a sus hijos, y los descendientes de éstos nunca se ven en problemas con las autoridades.

"Los puertorriqueños en Jersey City son muy caritati-

(PASA a la Página 23)

UNO DE LOS PRIMEROS. — El Dr. John J. Gumperz, le graba la voz al jovencito puertorriqueño, Francisco Matos, mediante un micrófono, y una cinta grabadora portátil. La escena es una de las que podrán verse en el interior y exterior de muchos apartamientos en Jersey City, N. J. (Foto para EL DIARIO-LA PRENSA).

Profesores - - -

(CONTINUACION)

vos. En una tragedia como la que ocurrió, se hacen eco de la desgracia y el dolor ajenos... Quieren educar a sus hijos en las escuelas parroquiales y en los mejores lugares de enseñanza, y son asiduos feligreses a la iglesias hispanas de la vecindad".

Es a su entender, por todas estas razones, que los tres distinguidos profesores seleccionaron esa vecindad, de la calle 9, como el área en que mejor podrían trabajar, desenvolverse y obtener la cooperación ciudadana deseada, para llevar a cabo felizmente un proyecto investigativo de esta naturaleza.

Los tres profesores estarán tres meses viviendo con los puertorriqueños, luego de lo cual referirán todo su trabajo y descubrimiento, a sus oficiales superiores en la Universidad de Yeshiva.

ALABA COMUNIDAD BORICUA. — El Rev. Padre Ronert S. Call, quien coopera con tres distinguidos expertos en idioma, que estudian el "fenómeno del bilingüismo" entre los puertorriqueños El Padre Call tuvo frases de verdadera alabanza para la comunidad puertorriqueña al "otro lado del Río Hudson". (Foto EL DIARIO-LA PRENSA, por M. Santini)

Chapter
III-1-b

THE CONTRASTIVE VALIDITY OF CENSUS DATA ON BILINGUALISM IN A PUERTO RICAN NEIGHBORHOOD[1]

Joshua A. Fishman and Charles Terry

Yeshiva University

Are most bilinguals sufficiently aware of their language behavior to be able to report it validly? Are there some aspects of bilingual behavior which are more validly self-monitored and self-reported than others? Assuming that bilinguals are inclined to report their language performance accurately, are they able to do so in response to sociolinguistically-oriented questions that differentiate between first language learned and current ability, or in response to questions that deal with predominant usage in various domains of social interaction (e.g., home, work, religion, etc.)? These queries remain to be answered--particularly for non-ideologized, lower-class bilinguals--even though the reliability of replies to such items is generally quite high, yielding a median census-recensus correlation coefficient of .81 across a wide gamut of questions many of which have considerably higher reliability (Fishman 1968). This paper attempts to cope with the problem of validity of language census items--a problem that has aroused increasing interest in recent years as sociolinguistic research has increased in volume (Fishman 1966, Lieberson 1966, Lieberson 1968, Prator and Whiteley 1967, Weinreich 1957)--by relating replies to such items to performance criteria ratings and to other performance measures.

Method

Respondents

A variety of linguistic, psychological, and sociological measurements of bilingual behavior were designed for use in a study of Puerto Ricans in Greater New York (Fishman, Cooper, Ma 1968). Selected for particularly intensive study were the people living within a four-block, Puerto Rican section of the "downtown" area of Jersey City. In this target area lived 431 persons of Puerto Rican background, comprising 90 households in all. More than half (58%) had been born in Puerto Rico and of these, more than half (60%) had been living on the mainland for ten years or less. They were a very young group, with 60% below the age of 18 and 28% below the age of 6. In general, the adults were poorly educated, and they held low income jobs. Half the adults had received no more than an elementary education, and of those who were employed, most worked as operatives or laborers.

Census

The first contact with persons living in the neighborhood was by means of a door-to-door language census (Fishman 1968). Bilingual census-takers asked a representative from each household to respond to a series of questions about himself and about the other members of the household. There were a series of language questions, including items assessing proficiency in various English and Spanish language skills (e.g., "Can you understand a conversation in English?"), frequency of English and Spanish usage in different contexts (e.g., "What language do you most frequently use at work for conversation with fellow-workers?"), and the first language learned for various purposes (e.g., "What was the first language in which you read books or newspapers?"). Preceding the language questions were several demographic queries, including items dealing with age, sex, birthplace, education, occupation, and number of years of residence in the United States. The census-takers were themselves fully bilingual and conducted their work in whatever language was most convenient for a given respondent.

Psycholinguistic Interview

Of those who were 13 years or older, over one-fifth (N=48) agreed to participate in a tape-recorded interview which lasted from two to four hours. An attempt was made to secure both male and female respondents who would represent the range of ages (of those 13 or older) and the range of educational and occupational backgrounds to be found in the neighborhood. The interviews, which were held in the respondent's home or in a field office in the neighborhood, were conducted by bilinguals who were able to use whatever language or combination of languages that was preferred by a given respondent.

The interview was designed for two purposes. First, it was devised to yield information about the respondent's performance on various proficiency and self-report devices adapted from the psychological literature. Second, it was designed to elicit samples of the respondent's English and Spanish speech under conditions of varying casualness or informality. The different sections of the psycholinguistic interview are briefly described below.

Listening comprehension. Five tape-recorded, naturalistic conversations, between Spanish-English bilinguals living in New York, were obtained and employed as tests of listening comprehension and interpretation (Cooper, Fowles, and Givner 1968). Each conversation, in which the speakers switched back and forth between English and Spanish, was intended to represent a different type of social situation or context. After hearing a conversation twice, respondents were asked a series of questions in order that their comprehension and interpretation of the conversation might be assessed. Several types of questions were asked, including items testing comprehension of the Spanish portions of the conversation, items testing comprehension of the English portions, questions requiring the respondents to make inferences about the social relationships between speakers, questions asking the respondent to recall which speakers used which language and when, and questions about the appropriateness of using English or Spanish during specific portions of the conversation.

Word naming. Respondents were asked to give, within one-minute time limits, as many different English (or Spanish) words that named objects or items appropriate to a given context or domain as they could (Cooper 1968). For example, respondents were asked to give as many different English (Spanish) words as possible that named things that could be seen or found in a kitchen. Respondents named words for each of five domains--family, neighborhood, religion, education, and work--responding to all domains in one language and then to all domains in the other.

Word association. Respondents were also asked to give continuous associations, within one-minute periods, to each of the following stimulus words: home, street, church, school, factory, casa, calle, iglesia, escuela, and factoría.[2] These stimuli were intended to represent the five contexts or domains of family, neighborhood, religion, education, and work. Responses were restricted to the language of the stimulus word. The word association task always followed the word naming task, but there was always at least a ten-minute interval between them, during which time another technique was administered.

Word frequency estimation. Respondents were asked to rate, on an 8-point scale, the frequency with which they heard or used each of 150 different words, of which half were in Spanish and half in English (Cooper and Greenfield 1968b). The 75 words in each language were comprised of 5 sets of 15 words, the words for each set having been selected to represent a domain or context. The domains family, friendship, religion, education, and work were employed. For example, some of the English words which represented the domain of education were teacher, blackboard, history, and science. Respondents rated all the words in one language before rating the words in the other. The items representing each domain were evenly distributed throughout the list of words in each language.

Spanish usage rating scale. Respondents were asked to rate, on an 11-point scale, the degree to which they used Spanish (relative to English) with other Puerto Rican bilinguals at home, in their neighborhood, at church, at school, and at work (Cooper and Greenfield 1968a). For each context, degree of usage was rated assuming interlocutors who varied by age, sex, and relationship to the respondent. For example, respondents were asked how much of the conversation was typically in Spanish when talking to Puerto Rican neighbors of the same age and sex in their neighborhood.

Linguistic elicitation procedures. Based both on the notion of verbal repertoire, advanced and elaborated by Gumperz (1964, 1967), and on the construct of linguistic variable, as developed by Labov

(1963, 1966), an attempt was made to vary systematically the interview contexts in which English and Spanish were elicited (Ma and Herasimchuk 1968). By extending Labov's method to bilingual speech situations, an attempt was made to obtain speech in two languages that varied along a continuum of carefulness or casualness. Thus, the phonological variation associated with changes in the interview context could be observed in English and in Spanish. The degree of systematic phonological variation observed in each language could serve as one index of the extent of the speaker's linguistic resources or verbal repertoire. Phonological variation was observed in terms of five elicitation procedures or contexts. Described below, they are presented in order of the formality or carefulness of the speech elicited, with the most formal context first and the most casual last.

1. Word list reading. Two brief lists of words, one in English and one in Spanish, were given to the respondent to read aloud. The lists contained examples of sounds which were hypothesized to vary as a function of the elicitation procedure.

2. Paragraph reading. Four brief paragraphs, two in each language, were also given to the respondent to read aloud. Like the word lists, the paragraphs were constructed so as to include certain phonological variables.

3. Word naming. Performance in the word naming task (described earlier) was studied as an example of speech that was midway in formality between more careful speech, represented by reading aloud, and more casual speech, represented by free conversation.

4. Interview style. The speech produced during the formal question and answer periods of the interview, particularly responses

to questions about the listening comprehension passages, were analyzed as examples of relatively careful discourse.

5. Casual speech. The interviewers attempted to elicit casual speech in English and in Spanish by encouraging respondents to digress from the interview material and by asking questions designed to promote personal anecdotes or excited replies. Casual speech was sometimes also obtained fortuitously, as when the respondent was called to the telephone or when he spoke to a child who had come into the room.

A priori Scoring

Two types of scoring were employed: scoring based on a priori classifications and scoring based on the clustering of items that emerged from factor analyses (empirical scoring). The a priori scores are described for each of the various techniques, as follows.

Census. A difference score, for which the English rating was subtracted from the Spanish rating, was computed for each of the four skills of listening, speaking, reading, and writing. Furthermore, a score reflecting the degree to which Spanish was claimed for use at home (the mean of three items) and a score reflecting the degree to which Spanish was the first language acquired (the mean of four items) were computed. In addition, responses to a single query, language preferred for conversation, were treated as scores for purposes of the subsequent data analysis.

Listening comprehension. For each of the five recorded conversations two difference scores were computed. One was the percentage correct of items assessing comprehension of the English portion subtracted from the percentage correct of items assessing comprehension of the Spanish portion. The second was the percentage of times the respondent correctly indentified the use of English (who used English at what points during the conversation) subtracted from the percentage of times he correctly identified the use of Spanish. These difference scores are referred to as language comprehension and language identification scores, respectively.

Word naming. Five difference scores were computed, one for each domain, in which the number of English words produced was subtracted from the number of Spanish words produced. In addition, a difference score was computed for respondents' performance on a non-contextualized (general) word naming task, used as a trial run.

Word association. Five difference scores were computed in the same manner as for the word naming task. In addition, the proportion of "human" responses (words that named people, e.g., teacher, policeman) was computed for each domain in each language (Findling 1968).

Word frequency estimation. Five difference scores were computed, one for each domain, in which the average English rating for the 15 words representing a given domain was subtracted from the average Spanish rating.

Spanish usage rating. Five scores were computed, one for each context, representing the average amount of Spanish (as a proportion of a total conversation) that the respondent reported he used with the various interlocutors specified.

Phonological variables. The number of realizations of each of a set of linguistic variants was counted for each of the five elicitation contexts. For example, in Puerto Rican Spanish, three variants of /s/ in word-final position are possible: [s], [h], and [ø]. The number of occurrences of each of these variants was counted in each of the five contexts. In all, variation within 17 sets of English variables and 8 sets of Spanish variables was described in this fashion.

Empirical Scoring

All the items which entered into the a priori scores for a given technique were subjected to a factor analysis. Factor scores (based on all items that clustered together into a "factor") were computed for two techniques as follows.

Census. Scores based on five factors were computed: Spanish literacy (eight items referring for the most part to the reading and writing of Spanish); Spanish-oral (four items referring to the speaking and understanding of Spanish); English (four items referring to the ability to understand, speak, read, and write English); Spanish-at work (three items referring to the use of Spanish at work); and Spanish-in religion (three items referring to the use of Spanish for religious purposes).

Word frequency estimation. Scores based on five factors were computed. These were English (68 items, most of which were English words); Spanish (46 items, most of which were Spanish words); Skill (7 items, 5 of which were English words, related to education and professionalism); Work (24 items, 18 of which were Spanish words, related primarily to the domain of work); and Religion (5 items, 4 of which were in Spanish, related to the domain of religion).

For the other techniques, factor scores were not computed, although factors were derived. Items that represented each factor (generally, the items with the highest loadings) were selected for those other techniques and were employed in the subsequent analyses along with the factor scores and a priori scores mentioned earlier.

Criterion Scores

The a priori and empirical scores were studied in relationship to four criterion scores. The criterion scores were based on ratings made by two linguists who had scored the phonological variables. The four criteria are described below. All were based on ratings of performance as recorded during the psycholinguistic interview.

Accentedness. Respondents were rated in terms of the degree to which the phonological (and syntactic) structures of one language appeared to influence speech produced in the other. A seven-point scale was used on which high scores indicated Spanish influence upon English speech, low scores indicated English influence upon Spanish speech, and scores in between indicated maximum language distance, or no influence by either language upon speech produced in the other.

English repertoire range. Respondents were rated in terms of the number of English speech styles which they appeared to use and the fluency with which these were employed. A six-point scale was used, ranging from knowledge of only a few words and phrases, at one extreme, to the ability to employ both careful and casual speech styles, in a maximally fluent manner, at the other.

Spanish repertoire range. Respondents were also rated in terms of the number and fluency of Spanish speech styles which they were judged to use. A four-point scale was employed, which ranged from the use of only a single, casual style to the fluent use of several speech styles, including more careful, formal Spanish.

Reading. Based on their performance on the reading tasks (word lists and paragraphs), respondents were rated, on a five-point scale, in terms of their ability to read in the two languages. High scores indicated that the respondent could read only in Spanish (or not at all), low scores indicated that he could read only in English, and intermediate scores indicated that he could read in both languages.

Data Analysis

Correlations with Criterion Scores

Table 1 reveals the validity coefficients obtained between census scores and the four criterion ratings mentioned earlier. It is clear from an inspection of Table 1 that the correlations obtained with three of the four criteria are uniformly high and significant whereas in the case of the fourth, Spanish Repertoire Range, neither of these characterizations holds. In connection with Accentedness, English Repertoire Range and Reading the correlations with census scores range in magnitude (disregarding signs) from .43 to .82 (the range being nearly the same whether we consider a priori or empirical census scores). On the other hand, for Spanish Repertoire Range the correlations with a priori census scores range from .03 to .48 while the correlations with empirical census scores range from .04 to .59. For the first three criteria all 36 out of 36 correlations with census scores are significant at the .05 level (35 out of 36 attaining significance at the .01 level) while for the fourth criterion only four out of 12 correlations with census scores attain significance at the .05 level.

The reason for the general lack of correspondence between census scores and Spanish Repertoire Range scores is quite clearly due to the fact that the latter variable revealed little variability in our population (see Table 2). The greater homogeneity of our subjects

TABLE 1. VALIDITY COEFFICIENTS: CENSUS SCORES AND INDEPENDENTLY OBTAINED CRITERION RATINGS

	Criteria				
A Priori Census Scores	Accent	ERR	Reading	SRR	Mdn
First lang used	.77**	-.43**	.57**	.48**	.53
(n)	(45)	(45)	(43)	(45)	
Most freq at home	.82**	-.59**	.68**	.34*	.63
(n)	(45)	(45)	(43)	(45)	
Lang like convers	.50**	-.57**	.46**	.17	.48
(n)	(43)	(43)	(41)	(43)	
Understanding S-E	.59**	-.43**	.47**	-.03	.45
(n)	(45)	(45)	(43)	(45)	
Speaking S-E	.50**	-.48**	.50**	-.08	.49
(n)	(45)	(45)	(43)	(45)	
Reading S-E	.72**	-.45**	.65**	.36*	.55
(n)	(45)	(45)	(43)	(45)	
Writing S-E	.77**	-.54**	.67**	.29	.61
(n)	(45)	(45)	(43)	(45)	
Mdn	.72	.48	.57	.29	.53
Empirical Census Scores					
Spanish literacy	.77**	-.43**	.55**	.59**	.57
(n)	(45)	(45)	(43)	(45)	
English	-.63**	.58**	-.65**	.08	.61
(n)	(45)	(45)	(43)	(45)	
Spanish oral	.71**	-.49**	.54**	.29	.51
(n)	(45)	(45)	(43)	(45)	
Spanish work	.62**	-.76**	.43*	-.04	.51
(n)	(30)	(30)	(28)	(30)	
Spanish religion	.76**	-.55**	.57**	.26	.56
(n)	(45)	(45)	(43)	(45)	
Mdn	.71	.55	.55	.26	.56

** = $p \leq .01$
* = $p \leq .05$

Table 2

INTERCORRELATIONS AMONG CRITERION VARIABLES

	Correlation				$\bar{x}$	S.D.
Variable	1	2	3	4		
1. Accentedness		.74**	.27	-.69**	2.00	1.74
2. Reading			.19	-.61**	2.44	1.43
3. Spanish repertoire range				.04	2.04	.76
4. English repertoire range					2.84	1.61

**p $<$.01

with respect to SRR is consistent with the fact that for most of them Spanish was the first language learned and remained primarily a home and neighborhood language (Fishman 1968). Thus, there was more opportunity for our subjects to vary with respect to their English usage and skills, due to differential exposure to English at school and at work, than to vary with respect to their Spanish usage and skills. The other three criteria all possess an English component, whereas SRR does not.

In general, then, we may conclude that the obtained correlations between census scores and independent criterion scores indicate that whenever the latter do not suffer from undue restriction of range the validity of census items tends to be both rather substantial and uniformally significant. Indeed, for the population under study, census scores as a group proved to be more highly related to criterion scores than any other of the types of scores obtained (Fishman and Cooper 1968).

No striking differences are noted between empirical and a priori census scores in this connection. If census items themselves do have differential validity, this would seem to be related to the range of talent with which they deal. Thus items such as those dealing with understanding, speaking or liking Spanish on which there was relatively little interpersonal variation in our sample yielded lower validity coefficients (mostly .40's and .50's) than did items dealing with writing Spanish, use of English and frequency of use of Spanish at home, on which there was relatively greater interpersonal variation (correlations with criteria mostly from .50's to .70's).

Census Correlations with A Priori Scores Derived from Various Measures of Bilingualism

Table 3 recapitulates the median correlations between census scores and the criterion scores reviewed above and, at the same time, permits us to compare the foregoing to median census score correlations with the large variety of a priori scores obtained on the study population.[2] A perusal of this table reveals that insofar as a priori scores are concerned census scores are most highly correlated with other self-report scores (Spanish Usage Rating and Word Frequency Estimation) and least highly correlated with direct proficiency measures such as conversation scores and linguistic (phonological) realization scores. As for the relationship between census scores and indirect proficiency measures the a priori Word Naming scores show significantly higher correlations with census scores than do the a priori Word Association scores, particularly when empirical census scores are utilized. In general, there is a consistent tendency for empirical census scores to be somewhat more related to a priori measures of various kinds than are the a priori census scores. Demographic measures (age, sex, education, birthplace, etc.) show a higher relationship to census scores than do either a priori Word Association scores or the direct a priori measures of proficiency, but they are obviously less related to census scores than either Word Naming scores or other a priori self report measures.

Census Correlations with Empirical Scores Derived from Various Measures of Bilingualism

Table 4 recapitulates the median correlations between census scores and the criterion scores previously reviewed, and, at the same time, permits us to compare the foregoing with correlations between

TABLE 3. VALIDITY COEFFICIENTS: CENSUS SCORES AND VARIOUS A PRIORI SCORES

	A Priori Scores								
A Priori Census Scores	WN	WA	Convers	Ling	SUR	WFE	Cri-teria	Demog	Row Mdns
1st lang used	.45	.12	.18	.12	.47	.28	.53	.34	.31
Most freq - home	.45	.20	.27	.19	.64	.50	.63	.35	.40
Lang liked convers	.23	.03	.22	.16	.31	.31	.48	.27	.25
Understanding S-E	.21	.14	.16	.17	.49	.36	.45	.22	.21
Speaking S-E	.17	.15	.25	.11	.25	.37	.49	.27	.25
Reading S-E	.25	.01	.20	.18	.47	.34	.55	.18	.23
Writing S-E	.44	.23	.21	.13	.49	.35	.61	.27	.31
Column Medians	.25	.14	.21	.16	.47	.36	.53	.27	.25
Empirical Census Scores									
Span literacy	.42	.15	.11	.15	.55	.35	.57	.26	.31
English	.27	.16	.29	.18	.37	.49	.61	.29	.29
Span oral	.51	.25	.20	.19	.54	.34	.51	.29	.31
Span work	.32	.23	.26	.18	.13	.29	.51	.20	.25
Span religion	.41	.09	.12	.19	.54	.53	.56	.36	.39
Column Medians	.42	.16	.20	.18	.54	.35	.56	.29	.31

TABLE 4. VALIDITY COEFFICIENTS: CENSUS SCORES AND VARIOUS EMPIRICAL SCORES

	Empirical Scores								
A Priori Census Scores	WN	WA	Convers	Ling	SUR	WFE	Cri-teria	Demog	Row Mdns
1st lang used	.41	.13	.06	.15	.19	.15	.53	.34	.17
Most freq - home	.35	.18	.14	.19	.50	.15	.63	.35	.27
Lang liked convers	.54	.19	.15	.23	.28	.03	.48	.27	.23
Understanding S-E	.21	.09	.25	.13	.41	.07	.45	.22	.21
Speaking S-E	.27	.23	.33	.17	.39	.07	.49	.27	.27
Reading S-E	.19	.07	.13	.16	.51	.14	.55	.18	.15
Writing S-E	.45	.23	.17	.21	.43	.26	.61	.27	.27
Column Medians	.35	.18	.15	.17	.41	.14	.53	.27	.23
Empirical Census Scores									
Span literacy	.39	.15	.11	.19	.29	.16	.57	.26	.23
English	.36	.21	.29	.25	.45	.17	.61	.29	.29
Span oral	.39	.17	.15	.23	.42	.14	.51	.29	.26
Span work	.13	.23	.07	.35	.21	.28	.51	.20	.22
Span religion	.35	.10	.11	.21	.39	.15	.56	.36	.28
Column Medians	.36	.17	.11	.23	.39	.16	.56	.29	.26

census scores and the variety of empirical scores obtained on the study population. Once again (as in the case of Table 3 and the variety of a priori scores) census scores are most highly related to another self report score (Spanish Usage Rating) and least highly related to the direct measures of proficiency (conversation scores and phonological realization scores). As before, we again find that census scores are far more related to Word Naming than to Word Association scores. Once again, we find that census scores are more related to demographic measures than they are to direct measures of proficiency, but that they are less related to such measure than they are to Word Naming. Finally, we again find that empirical census scores are generally slightly more related to other empirical scores than are the a priori census scores, but, in this case, the difference between the two is really quite negligible.

Some Detailed Indications of Census Validity

Above and beyond the broad outline of validity, as indicated in the foregoing discussion, there are a large number of significant individual correlations between self-reported census data on bilingualism and other measures of bilingualism which are also indicative of the validity of sociolinguistically formulated census items. Some of these will be mentioned here since the total number of such correlations is too great to be enumerated.

With Word Naming

The census items dealing with most frequent language at home correlate .57 ($p < .01$) with the a priori S-E Word Naming score for the home domain. The "Spanish literacy" factor scores derived from census replies yield their highest correlations with the "English Word Naming:

School" factor scores (-.54; p <.01) and with the S-E Word Naming scores for the education domain (.59; p< .01). The "Spanish in Religion" factor scores derived from census replies yield their highest correlation with the English Word Naming: Church factor (-.51; p< .01).

With Word Association

It will be remembered that Word Association scores yielded generally very low correlations with census self-reports. However, this was more a reflection of the Word Association data than of the census data since one of our general findings has been that Word Association measures of bilingualism show little relationship to other measures of bilingualism, whether these be empirical, a priori, performance or usage (Cooper 1968). Nevertheless, even in connection with Word Association some significant correlations with census data obtain. The most indicative of these is the correlation between "Spanish in Religion" factor scores derived from census data and the S-E Word Association scores in the religion domain (.47, p <.01).

With Spanish Usage Ratings

A priori census scores on first language used yield their highest correlation with SUR scores on Spanish at home (.56; p <.01). A priori census scores on most frequent language at home yield their highest correlations with SUR scores on Spanish at home (.67; p <.01) and Spanish in the neighborhood (.70; p <.01). The a priori census score on language liked most for conversation is most highly correlated with SUR scores on Spanish at home (.34; p <.05).

Empirical census scores constituting the "English" factor yield their highest correlation with SUR scores on Spanish in the neighborhood (-.54; p <.01). "Oral Spanish" factor scores derived from census data yield their highest correlation with SUR scores on Spanish at home (.62; $p < .01$). "Spanish in Religion" factor scores derived from census data yield their highest correlation with SUR scores on Spanish in religion (.59; $p < .01$).

All of the foregoing correlations between census scores and SUR scores deal only with a priori SUR scores. SUR factors were derived but remained unnamed and, as a result, census correlations with these factors cannot be used for the purpose of establishing face validity.

With Demographic Variables

Census scores on first language used yield their highest correlation with age (.52; $p < .01$), indicating that the older the individual the more likely that Spanish was the first language to be used in speaking, reading and writing. Census scores on most frequent language used at home yield their highest correlation with number of years in the (continental) United States (-.54; $p < .01$), indicating that the more years members of our study neighborhood had lived in the United States the less they claimed Spanish as their most frequent language at home. The census item on language most liked for conversations obtained its highest correlation with occupation (-.66; $p < .01$), indicating that the higher the occupation the less Spanish is claimed as liked most for conversations.

Each of the factor scores derived from census data yields a highest correlation with a demographic variable that tends to support its (the factor's) face validity. Thus "Spanish literacy" scores correlate most substantially with birthplace (.49; $p < .01$); "English" scores correlate most substantially with number of years in the United States (.47; $p < .01$); "Oral Spanish" scores correlate most substantially with occupation (-.65; $p < .01$); "Spanish at work" scores correlate most substantially with number of years in the United States (-.43; $p < .05$); and "Spanish in religion" correlates most substantially with occupation (-.64; $p < .01$).

In every case, both the sign and the domain of the highest correlation between census scores and demographic variables reinforce the face validity of the census data obtained.

With Conversation (Listening Comprehension) Scores[3]

As mentioned earlier, there were rather few significant correlations between census scores and listening comprehension scores dealing with the detailed manifest or latent meanings of 5 taped conversations. Nevertheless, the median correlation between a priori census scores and conversational manifest content scores was .32 ($p < .05$) whereas the median correlation between empirical census scores and conversational manifest content scores was .35 ($p < .05$). The a priori census score that correlates most substantially across all a priori conversational scores is that for Spanish as most frequent language at home (median correlation .27). The a priori census score that correlates most substantially with all empirical conversational scores is Speaking S-E (.33; $p < .05$). All of the "English" factor scores derived from census data correlate significantly with the manifest content conversational scores (median correlation -.40; $p < .01$) and, in general, English factor scores yield the highest (but consistently negative) correlations between empirical census scores and either empirical or a priori conversational scores. We have noted before that whereas our subjects had mastered Spanish to a substantially similar degree they differed widely in their mastery of English (also see

Fishman and Cooper 1968). Here we note that English claims on the census were also more highly related to conversational scores in view of the fact that all conversations contained both English and Spanish passages.

With Linguistic Scores[4]

We noted earlier that the lowest correlations with census scores were those that obtained for linguistic realizations. Nevertheless there are a number of such that correlate quite substantially with census scores. Among these we find two Spanish variables and eight English variables (Ma and Herasimchuk 1968), all of which show directionally appropriate correlation with census claims. A few examples may illustrate this rather unexpected finding.

RL-2, as obtained in Spanish interview style, is a very common substandard Puerto Rican substitution of l for r (e.g., _estal_ for _estar_). This realization has a median correlation of .37 across all five empirical census scores and such significant individual correlations as -.38 ($p < .05$) with "English" factor scores and .48 ($p < .01$) with "Oral Spanish" factor scores derived from census replies. R#V-1, as obtained in English paragraph reading, is standard final r in English before a word that begins with a vowel. Actually, this realization was found to be more typical of Puerto Rican Spanish speakers than of native English speakers in New York and, as a result, may be considered an orthographically influenced interference variant in local Puerto Rican English. This realization has a median correlation of .39 across all five empirical census scores and such significant individual correlations as .48 ($p < .01$) with "Spanish Literacy" factor scores and .39 ($p < .05$) with "Oral Spanish" factor scores derived from census data. UH-2, in English paragraph reading, is a standard English sound (as in but) that differentiates native or near-native English speakers from those whose English is influenced by Spanish phonology. This realization has a median correlation of .45 across all five empirical census scores and such significant individual correlations as -.54 ($p < .01$) with "Spanish Literacy" factor scores, .45 ($p < .01$) with "English" factor scores and -.41 ($p < .05$) with "Oral Spanish" factor scores derived from census data. A very similar picture obtains for EH-2, in English paragraph reading. It too is a standard English sound (as in cat) that is not available to speakers who speak English with Spanish phonological interference. This realization has a median correlation of .47 across all five empirical census scores and such significant individual correlations as -.62 ($p < .01$) with "Spanish Literacy" factor scores, .42 ($p < .05$) with "English" factor scores and -.52 ($p < .01$) with "Oral Spanish" factor scores derived from census data. EH-2 also correlates -.69 ($p < .01$) with Spanish as most frequent language at home and -.65 ($p < .01$) with Spanish as the language of writing.

From the foregoing it is clear that the replies to sociolinguistic census items dealing with more general questions of bilingual usage and proficiency can be used to locate individuals with quite specific phonological realization patterns. It is also clear that the greater variability shown by our respondents in their English (than in their Spanish) phonology is responsible for the fact that there were more and larger significant correlations between census responses and English linguistic realizations than between census responses and Spanish linguistic realizations.

Discussion

The fact that census scores are more highly related to the four criterion measures than they are to other measures of bilingual proficiency indicates (to the extent that the other measures too are related to these criteria) that the census scores and other scores might profitably be summated, via multiple regression methods, in predicting these criteria. Census scores and other bilingual measures are not so highly redundant that they can be said to be measuring the very same aspects of the criteria under consideration.

The greatest difference exists between census scores and direct measures of bilingual proficiency. The latter yield manifest content, latent content, and phonological realization scores most of which are substantially unrelated to census scores. That is to say that claimed bilingual usage and ability are little related to the details of understanding bilingual conversations, nor are they related to most of the phonological realizations which occur in actual conversation. Although there are a number of conversational and linguistic items that are significantly related to census claims it is obvious that these claims are more strongly related to focussed verbal fluency (Word Naming), to life experiences (demographic characteristics) and, most strongly of all, to recollections of predominant usage (Spanish Usage Ratings).

Census claiming is more akin to a respondent's substantially accurate self-perceptions as a bilingual than they are to his sociolinguistic performance minute by minute. Census claims are most related to naturalistic measures and observations. They are more related to Word Naming scores than to Word Association scores, to Conversation scores than to linguistic realization scores, to Spanish

Usage Rating scores than to Word Frequency Estimation scores. In general, empirical census scores yield somewhat higher validity coefficients than do a priori census scores. However, if the a priori census scores are sufficiently realistic the difference between them and empirically derived census scores tends to be far less noteworthy than the difference between the extent to which usage and proficiency measures on the one hand and naturalistic and atomized measures on the other hand are related to census scores themselves, regardless of whether the latter are a priori or empirical.

All in all, census scores would seem to have sufficient validity--under circumstances when respondents wish to give accurate replies--and seem to be sufficiently simple to obtain so as to merit the further specialized attention of sociolinguists and other students of bilingual societies. However, the fact that they are _not_ overwhelmingly related to proficiency measures of bilingualism (particularly to direct measures of performance proficiency) implies that other measures too might well be useful, jointly with census scores, in the multiple prediction of language use criteria.

Conclusions

Evidence has been presented that census scores, whether of an a priori or empirical nature, can have substantial validity, particularly in conjunction with criteria that reveal considerable internal variability or "range of talent." Since census scores involve respondents' awareness of their naturalistically perceived bilingual behavior they tend to correlate more substantially with other _naturalistic_ measures than with atomistic measures that deal with bilingual usage that is far from consciousness. Since census scores are based on *self-reports* of usage and proficiency they tend to correlate more substantially with other *self-report* measures than with more direct measures of proficiency or productivity. A priori and empirical census scores tend to have very similar validity coefficients with a very slight edge going to empirical scores over a priori scores. All in all, census scores are not so highly correlated with other measures of bilingual usage and ability that it is no longer necessary to examine their joint (rather than only their separate) prediction of appropriate criteria.

Footnotes

1. The research reported in this paper was supported under Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was supported by a grant to the Project Director by the College Entrance Examination Board.
2. For detailed tables of correlation between each a priori score or each empirical score (obtained from Word Naming, Word Association, Spanish Usage Rating, Word Frequency Estimation and Demographic Variables) and each census score consult Appendix, Chapter III-1-b, Fishman, Cooper, Ma, _et al_. (1968), Tables 5 to 9.
3. For detailed tables of correlation between _selected_ a priori and empirical conversational scores and each census score consult Appendix, Chapter III-1-b, Fishman, Cooper, Ma, _et al_. (1968), Table 10.
4. For detailed tables of correlation between _selected_ a priori and empirical linguistic realization scores and each census score consult Appendix, Chapter III-1-b, Fishman, Cooper, Ma, _et al_. (1968), Table 11.

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APPENDIX III-1-b

TABLE 5. VALIDITY COEFFICIENTS: CENSUS SCORES AND WORD NAMING SCORES

	A Priori WN							Empirical WN				
A Priori Census Scores	WN S-E General	WN S-E Home	WN S-E Neigh	WN S-E Relig	WN S-E Educ	WN S-E Work	Row Mdns	Eng WN Church	Eng WN School	Span WN Work	Span WN Home	Row Mdns
1st lang used	.29	.41**	.49**	.36*	.60*	.49**	.45	-.54**	-.58**	-.23	-.29	.41
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Most freq - home	.21	.57**	.42**	.40*	.58**	.48**	.45	-.48**	-.51**	-.09	-.21	.35
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Lang liked convers	-.07	.28	.26	.19	.39*	.03	.23	-.53**	-.51**	-.55**	-.56**	.54
(n)	(32)	(35)	(34)	(33)	(33)	(32)		(35)	(33)	(35)	(32)	
Understanding S-E	.18	.41*	.18	.23	.32*	.17	.21	-.32*	-.26	-.14	-.15	.21
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Speaking S-E	.18	.21	.03	.02	.23	.16	.17	-.25	-.32*	-.20	-.29*	.27
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(47)	(47)	(47)	
Reading S-E	.14	.33*	.36*	.19	.25	.24	.25	-.27	-.27	.02	-.11	.19
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(47)	(47)	(47)	
Writing S-E	.10	.55**	.52**	.31	.57**	.36*	.44	-.56**	-.54**	-.18	-.35*	.45
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(47)	(47)	(47)	
Column Mdns	.18	.41	.36	.23	.39	.24	.25	.48	.51	.18	.29	

TABLE 5 continued

	A Priori WN							Empirical WN				
Empirical Census Scores	WN S-E General	WN S-E Home	WN S-E Neigh	WN S-E Relig	WN S-E Educ	WN S-E Work	Row Mdns	Eng WN Church	Eng WN School	Span WN Work	Span WN Home	Row Mdns
Spanish literacy	.14	.44**	.45**	.36*	.59**	.40*	.42	-.50**	-.54**	-.19	-.29	.39
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
English	-.16	-.45**	-.33*	-.15	-.30	-.25	.27	.45**	.42**	.22	.30	.36
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Spanish Oral	.38*	.59**	.40*	.45**	.68**	.57**	.51	-.58**	-.56**	-.19	-.22	.39
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Spanish Work	-.05	.53**	.43*	.22	.42*	.21	.32	-.48*	-.29	.00	.04	.13
(n)	(21)	(23)	(22)	(21)	(21)	(20)		(21)	(21)	(23)	(20)	
Spanish Religion	.35*	.47**	.15	.39*	.47**	.47**	.43	-.51**	-.51**	-.12	-.19	.35
(n)	(34)	(37)	(36)	(35)	(35)	(34)		(35)	(35)	(37)	(34)	
Column Mdns	.16	.47	.40	.36	.47	.40	.42	.50	.51	.19	.22	.36

* p< .05
**p< .01

TABLE 6. VALIDITY COEFFICIENTS: CENSUS SCORES AND WORD ASSOCIATION SCORES

		A Priori WA						Empirical WA						
A Priori Census Scores		WA S-E Educ	WA S-E Work	WA S-E Relig	WA S-E Neigh	WA S-E Home	Row Mdns	WA Span Church	WA Span Street	Human Ratio E-Street	Human Ratio Sp-Church	Human Ratio Sp-Home	Human Ratio Sp-Street	Row Mdns
1st lang used		.08	.30	.32	.12	.10	.12	.36	.35	.19	-.07	.04	.07	.13
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Most freq--home		.20	.29	.32	.07	.08	.20	-.21	-.19	.17	-.10	.11	-.23	.18
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Lang liked convers		-.03	-.01	.03	.02	.10	.03	.45*	.46*	.08	.05	.04	-.29	.19
	(n)	(26)	(26)	(26)	(27)	(26)		(26)	(27)	(27)	(26)	(26)	(27)	
Understanding S-E		.14	.03	.29	.04	.26	.14	-.11	-.20	.07	-.04	-.02	-.22	.09
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Speaking S-E		.20	.19	.09	.05	-.15	.15	-.23	-.37*	.07	-.27	-.23	-.12	.23
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Reading S-E		.00	.26	.21	.00	.01	.01	-.08	-.16	.03	-.06	-.09	-.07	.07
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Writing S-E		.15	.33	.32	.17	.23	.23	-.34	-.33	.20	-.23	-.05	-.23	.23
	(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Column Mdns		.14	.26	.29	.05	.10	.14	.23	.33	.08	.07	.05	.22	.18

TABLE 6 continued

	A Priori WA						Empirical WA						
Empirical Census Scores	WA S-E Educ	WA S-E Work	WA S-E Relig	WA S-E Neigh	WA S-E Home	Row Mdns	WA Span Church	WA Span Street	Human Ratio E-Street	Human Ratio Sp-Church	Human Ratio Sp-Home	Human Ratio Sp-Street	Row Mdns
Spanish literacy	.09	.26	.21	.07	.15	.15	-.34	-.31	.17	.01	.08	-.12	.15
(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
English	-.16	-.25	-.30	-.12	.00	.16	.24	-.38*	.10	.28	.15	.19	.21
(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Spanish oral	.25	.34	.49**	.19	.19	.25	-.28	-.28	.12	-.16	.01	-.19	.17
(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Spanish work	.07	.23	.37	.32	.11	.23	-.13	-.07	-.26	-.43	-.20	-.42	.23
(n)	(17)	(17)	(16)	(17)	(16)		(16)	(17)	(17)	(16)	(16)	(17)	
Spanish religion	.09	.00	.47**	.12	-.04	.09	-.14	-.17	.19	.00	-.03	-.06	.10
(n)	(28)	(28)	(28)	(29)	(28)		(28)	(29)	(29)	(28)	(28)	(29)	
Colmun Mdns	.09	.25	.37	.12	.11	.16	.24	.28	.17	.16	.08	.19	.17

* p $<$.05
**p $<$ .01

TABLE 7. VALIDITY COEFFICIENTS: CENSUS SCORES AND SPANISH USAGE RATING SCORES

	A Priori SUR						Empirical SUR										
A Priori Census Scores	Ed	Work	Relig	Neigh	Home	Row Mdns	Emp 1	Emp 2	Emp 3	Emp 4	Emp 5	Emp 6	Emp 7	Emp 8	Emp 9	Emp 10	Row Mdns
1st lang used	.41	.25	.51**	.47**	.56**	.47	.61**	.55**	.07	.19	.17	.08	.18	.20	.53**	.29	.19
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Most freq - home	.10	.30	.64**	.70**	.67**	.64	.66**	.55**	.27	.19	.29	.46*	.55**	.65**	.76**	.35	.50
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Lang liked convers	.02	.41	.31	.17	.34*	.31	.49*	.49*	.14	.37	.33	-.03	.05	.25	.31	.22	.28
(n)	(8)	(21)	(29)	(35)	(36)		(22)	(22)	(20)	(23)	(26)	(28)	(28)	(24)	(20)	(20)	
Understanding S-E	.33	.24	.58**	.53**	.49**	.49	.48*	.45*	.44*	.40*	.40*	.38*	.41*	.45*	.31	.00	.41
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Speaking S-E	.00	-.13	.47**	.53**	.25	.25	.44*	.35	.39	.38	.40*	.39*	.51**	.44*	.35	.04	.39
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Reading S-E	-.22	-.15	.62**	.62**	.47**	.47	.59**	.59**	.28	.48*	.54**	.46*	.55**	.24	.56**	.18	.51
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Writing S-E	-.32	.47*	.55**	.60**	.59**	.55	.58**	.45*	.25	.42*	.42*	.32	.46*	.47*	.52*	.21	.43
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Column Mdns	.22	.25	.55	.53	.49	.47	.58	.49	.27	.38	.40	.38	.46	.44	.52	.22	.41

TABLE 7 continued

Empirical Census Scores	A Priori SUR Ed	Work	Relig	Neigh	Home	Row Mdns	Empirical SUR Emp 1	Emp 2	Emp 3	Emp 4	Emp 5	Emp 6	Emp 7	Emp 8	Emp 9	Emp 10	Row Mdns
Spanish literacy	.12	.35	$.55^{**}$	$.56^{**}$	$.59^{**}$	.55	$.60^{**}$	$.56^{**}$	.08	.27	.32	.19	.30	.29	$.51^{*}$	.21	.29
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(25)	(25)	
English	.00	-.20	$-.53^{**}$	$-.54^{**}$	$-.37^{*}$	.37	$-.51^{**}$	$-.40^{*}$	$-.46^{*}$	$-.43^{*}$	$-.45^{*}$	$-.47^{**}$	$-.54^{**}$	$-.44^{*}$	$-.47^{*}$	-.18	.45
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Spanish oral	.03	.37	$.57^{**}$	$.54^{**}$	$.62^{**}$	.54	$.63^{**}$	$.51^{**}$	.15	.21	.20	$.38^{*}$	$.46^{*}$	$.59^{**}$	$.74^{**}$	.24	.42
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Spanish work	.00	.37	.11	.13	.33	.13	.09	.11	$.53^{*}$	.07	-.01	.29	.14	.32	.40	.61	.21
(n)	---	(19)	(19)	(22)	(23)		(15)	(14)	(14)	(14)	(16)	(20)	(20)	(18)	(12)	(10)	
Spanish religion	.01	.16	$.59^{**}$	$.54^{**}$	$.59^{**}$	.54	$.72^{**}$	$.68^{**}$	.12	.16	.34	.26	$.40^{*}$	$.57^{**}$	$.65^{**}$	.37	.39
(n)	(9)	(21)	(31)	(37)	(38)		(24)	(24)	(22)	(25)	(27)	(29)	(29)	(25)	(21)	(21)	
Column Mdns	.01	.35	.55	.54	.59	.54	.60	.51	.15	.21	.32	.29	.40	.44	.51	.24	.39

$^{*}p < .05$
$^{**}p < .01$

TABLE 8. VALIDITY COEFFICIENTS: CENSUS SCORES AND WORD FREQUENCY ESTIMATION SCORES

	A Priori WFE						Empirical WFE					
A Priori Census Scores	S-E Home	S-E Educ	S-E Relig	S-E Work	S-E Neigh	Row Mdns	Eng	Span	Compe-tence	Depend	Cmnty life	Row Mdns
1st lang used (n = 40)	.30	.22	.38*	.28	.21	.28	-.34*	-.15	-.26	.14	-.02	.15
Most freq - home (n = 40)	.57**	.50**	.62**	.45**	.49**	.50	-.54**	.00	-.35*	.09	-.15	.15
Lang liked convers (n = 38)	.46**	.31	.23	.27	.44**	.31	-.35*	.06	-.03	.02	-.01	.03
Understand-ing S-E (n = 40)	.43**	.26	.42**	.27	.36*	.36	-.39*	-.06	-.07	.14	-.04	.07
Speaking S-E (n = 40)	.41**	.27	.54**	.28	.37*	.37	-.44**	-.07	-.12	-.02	-.04	.07
Reading S-E (n = 40)	.40**	.31*	.52**	.34*	.28	.34	-.43**	-.10	-.17	.14	-.09	.14
Writing S-E (n = 40)	.50**	.35*	.55**	.30	.35*	.35	-.64**	-.25	-.35*	-.09	-.26	.26
Column Mdns	.43	.31	.52	.28	.36	.35	.43	.07	.17	.09	.04	.14

TABLE 8 continued

	A Priori WFE						Empirical WFE					
Empirical Census Scores	S-E Home	S-E Educ	S-E Relig	S-E Work	S-E Neigh	Row Mdns	Eng	Span	Compe-tence	Depend	Cmnty life	Row Mdns
Spanish literacy (n = 40)	.35*	.30	.45**	.35*	.25	.35	-.40**	-.14	-.28	.16	-.09	.16
English (n = 40)	-.57**	-.38*	-.58**	-.28	-.49**	.49	.65**	.14	.24	.14	.17	.17
Spanish oral (n = 40)	.44**	.32*	.45**	.34*	.33*	.34	-.33*	.07	-.14	.20	-.10	.14
Spanish work (n = 25)	.57**	.29	.21	.00	.48*	.29	-.54**	.01	-.18	-.39*	-.28	.28
Spanish religion (n = 40)	.61**	.50**	.55**	.50**	.53**	.53	-.47**	.07	-.26	.15	.01	.15
Column Mdns	.57	.32	.45	.34	.48	.35	.47	.07	.24	.16	.10	.16

* p < .05
** p < .01

TABLE 9. VALIDITY COEFFICIENTS: CENSUS SCORES AND DEMOGRAPHIC VARIABLES

A Priori		Demographic Variables Gen range	Sex	Age	BP	Occup	No. Emp Members Househld	Educ	Yrs. in U.S.	Row Mdns
1st lang used		-.10	-.20	.52**	.45**	-.49**	-.07	-.23	-.45**	.34
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Most freq - home		-.03	.05	.49**	.45**	-.43*	.00	-.28*	-.54**	.35
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Lang liked convers		.30*	-.19	.27	.25	-.66**	-.16	-.37**	-.28	.27
	(n)	(45)	(45)	(45)	(44)	(29)	(45)	(45)	(45)	
Understanding S-E		-.30*	-.09	.19	.28	-.12	.09	-.25	-.39**	.22
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Speaking S-E		-.16	.02	.30*	.19	-.37*	.23	-.36**	-.35*	.27
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Reading S-E		-.10	-.01	.49**	.43**	-.25	.05	-.11	-.41**	.18
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Writing S-E		-.12	.06	.42**	.43**	-.51**	-.01	-.12	-.53**	.27
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Column Mdns		.12	.06	.42	.43	.43	.07	.25	.41	.27

TABLE 9 continued

Demographic Variables

Empirical		Gen range	Sex	Age	BP	Occup	No. Emp Members Househld	Educ	Yrs. in U.S.	Row Mdns
Spanish literacy		-.03	-.07	.47**	.49**	-.38*	-.14	-.02	-.44**	.26
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
English		.15	-.03	-.29*	-.29*	.43*	-.13	.40**	.47**	.29
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Spanish oral		-.11	-.17	.47**	.29*	-.65**	-.01	-.30*	-.38**	.29
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Spanish work		.17	.33	.00	-.04	-.23	.16	-.29	-.43*	.20
	(n)	(32)	(32)	(32)	(31)	(27)	(32)	(32)	(32)	
Spanish religion		-.16	-.13	.34*	.38**	-.64**	-.04	-.40**	-.42**	.36
	(n)	(47)	(47)	(47)	(46)	(29)	(47)	(46)	(47)	
Column Mdns		.15	.13	.34	.29	.43	.13	.30	.43	.29

* $p < .05$
**$p < .01$

TABLE 10. VALIDITY COEFFICIENTS: CENSUS SCORES AND SELECTED CONVERSATIONAL MEASURES

	A Priori Conv. Measures						Empirical Conv. Measures				
	Manifest Content Scores										
A Priori Census Scores	Story 1	Story 2	Story 3	Story 4	Story 5	Row Mdn with all a priori	Manif Con-tent Eng 1	Manif Con-tent Eng 2	Eng Usage: Ident	Manif Con-tent Eng 3	Row Mdn with all Empirical
1st lang used	.23	.03	.51**	.23	.27	.18	-.23	-.36*	-.41*	-.15	.06
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Most freq - home	.29	.13	.43**	.26	.43**	.27	-.27	-.15	-.33	-.28	.14
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Lang liked convers	.31	.21	.36*	.11	.23	.22	-.21	-.15	-.24	-.27	.15
(n)	(39)	(39)	(36)	(38)	(39)		(36)	(32)	(24)	(39)	
Understanding S-E	.36*	.15	.32*	.13	.45*	.16	-.53**	-.56**	-.45*	-.31*	.25
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Speaking S-E	.56**	.44**	.32*	.32	.45**	.25	-.41**	-.45**	-.44*	-.41**	.33
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Reading S-E	.46**	.23	.27	.25	.30	.20	-.21	-.45**	-.38	-.27	.13
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Writing S-E	.35*	.24	.48**	.25	.39*	.21	-.23	-.37*	-.37	-.20	.17
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Column Mdns	.36	.23	.32	.25	.39	.21	.23	.37	.38	.27	.15

TABLE 10 continued

	A Priori Conv. Measures						Empirical Conv. Measures				
	Manifest Content Scores										
Empirical Census Scores	Story 1	Story 2	Story 3	Story 4	Story 5	Row Mdn with all a priori	Manif Con-tent Eng 1	Manif Con-tent Eng 2	Eng Usage: Ident	Manif Con-tent Eng 3	Row Mdn with all Empirical
Spanish literacy	.32*	.07	.44**	.12	.16	.11	-.17	-.29	-.37	-.11	.11
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
English	-.49**	-.40**	-.35*	-.37*	-.53**	.29	.37*	.46**	.36	.40**	.29
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Spanish oral	.25	.04	.55**	.17	.44**	.20	-.38*	-.25	-.34	-.27	.15
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Spanish work	.31	.52**	.17	.36	.55**	.26	.08	.10	.02	-.37	.07
(n)	(27)	(27)	(24)	(27)	(27)		(24)	(21)	(16)	(27)	
Spanish religion	.38*	.06	.33*	.06	.29	.12	-.40*	-.32	-.29	-.29	.11
(n)	(41)	(41)	(38)	(40)	(41)		(38)	(34)	(25)	(41)	
Column Mdns	.32	.07	.35	.17	.44	.20	.37	.29	.34	.29	.11

* $p < .05$
**$p < .01$

TABLE 11. VALIDITY COEFFICIENTS: CENSUS SCORES AND SELECTED LINGUISTIC REALIZATIONS

	A Priori Scores								Empirical Scores						
A Priori Census Scores	S#-2 (WN, Sp)	RL-2 (B, Sp)	R#V-1 (C, Eng)	OH-1 (WN, Eng)	T_M-1 (WN, Eng)	OH-3 (B, Eng)	RC-1 (B, Eng)	Row Mdn with all a priori	UH-2 (C, Eng)	EH-2 (C, Eng)	NG-2 (WN, Eng)	OH-1 (B, Eng)	T_M-1 (B, Eng)	RC-0 (A, Eng)	Row Mdn with all empirical
1st lang used	-.39*	.22	.43*	-.48**	-.53**	-.66**	-.27	.12	-.47**	-.48**	-.33	-.07	-.57**	.04	.15
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Most freq - home	-.33*	.35*	.56**	-.33*	-.49**	-.30	-.31	.19	-.55**	-.69**	-.51*	-.19	-.34	.06	.19
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Lang liked convers	-.33	.19	.00	-.23	-.16	-.11	-.57**	.16	-.37*	-.35*	-.51*	-.52**	-.24	-.33	.23
(n)	(32)	(38)	(28)	(37)	(37)	(25)	(27)		(32)	(32)	(18)	(25)	(25)	(17)	
Understanding S-E	-.26	.27	.28	-.24	-.11	-.22	-.03	.17	-.28	-.37*	-.18	-.38*	-.29	-.04	.13
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Speaking S-E	-.22	.37*	.32	.04	-.06	-.09	-.01	.11	-.35*	-.26	-.32	-.27	-.24	-.31	.17
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Reading S-E	-.39*	.28	.43*	-.32*	-.48**	-.07	-.18	.18	-.40*	-.39*	-.24	-.37	-.14	.00	.16
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Writing S-E	-.42*	.39*	.30	-.33*	-.41**	-.27	-.30	.13	-.51**	-.65**	-.48*	-.32	-.41*	.03	.21
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Column Mdns	.33	.28	.32	.32	.40	.22	.27	.16	.40	.39	.33	.32	.29	.04	.16

TABLE 11 continued

Empirical Census Scores	A Priori Scores								Empirical Scores						
	S#-2 (WN, Sp)	RL-2 (B, Sp)	R#V-1 (C, Eng)	OH-1 (WN, Eng)	T_M-1 (WN, Eng)	OH-3 (B, Eng)	RC-1 (B, Eng)	Row Mdn with all a priori	UH-2 (C, Eng)	EH-2 (C, Eng)	NG-2 (WN, Eng)	OH-1 (B, Eng)	T_M-1 (B, Eng)	RC-0 (A, Eng)	Row Mdn with all empirical
Spanish literacy	-.49**	.25	.48**	-.44**	-.56**	-.36	-.38*	.15	-.54**	-.62**	-.47*	-.25	-.32	-.02	.19
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
English	.25	-.38*	-.27	.09	.09	.03	.08	.18	.45**	.42*	.46*	.31	.33	.38	.25
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Spanish oral	-.19	.48**	.39*	-.42**	-.36*	-.71**	-.30	.19	-.41*	-.52**	-.29	-.09	-.71**	.28	.23
(n)	(33)	(40)	(30)	(39)	(39)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Spanish work	-.13	-.11	-.22	-.17	.03	.30	-.19	.18	-.34	-.33	-.49	-.38	-.44	-.52	.35
(n)	(20)	(28)	(18)	(25)	(25)	(16)	(17)		(21)	(21)	(11)	(16)	(16)	(8)	
Spanish religion	-.31	.37*	.41*	-.32*	-.21	-.23	-.41*	.19	-.45**	-.47**	-.33	-.21	-.41*	-.06	.21
(n)	(33)	(40)	(30)	(39)	(35)	(26)	(28)		(34)	(34)	(20)	(26)	(26)	(17)	
Column Mdns	.25	.37	.39	.32	.21	.30	.30	.18	.45	.47	.46	.25	.41	.28	.23

* $p < .05$
**$p < .01$

Chapter
III-2-a

LIFE IN THE NEIGHBORHOOD:
A FACTOR ANALYTIC STUDY OF PUERTO RICAN MALES

Gerard Hoffman

Introduction

The relevant data which is available to an investigation of a bilingual population can be obtained in two ways. Behavior, linguistic and otherwise, can be observed naturalistically using techniques of participant-observation. The necessary data can also be elicited by interviews, tests and the like. These two methods complement each other and provide richer results together than either would alone.

The data utilized in the present study was elicited by an open-ended interview. Demographic data already obtained from a language census of the same population was used to pinpoint Ss to be interviewed. The content of the interview schedule was prepared after several drafts of a language related participant-observation based ethnographic summary had been completed. The ethnographic summary (Hoffman, 1968) was based upon an intensive survey of the relevant literature, in-depth conversations with New York resident Puerto Ricans from many walks of life, and months of participant-observation of this life. The current interview study focuses and seeks to clarify those observed behaviors which seemed to most clearly reflect the Puerto Rican and American values of members of the community. Its main purpose is to discover which aspects of their life respondents associated with being Puerto Rican and which they associated with being American and how or whether they attain a modus vivendi between them.

The interview

The topics covered by the interview (Fishman, et al., 1968; Appendix B) were as follows: hopes and aspirations; social contacts; language usage and attitudes; attitudes towards Americans and Puerto Ricans; concept of self as Puerto Rican and as American; ethnic behaviors (lo-culture activities); cultural participation (hi-culture activities); and attitudes toward children's behaviors. The data obtained consists of self-reported behaviors, attitudes and opinions of 32 adult male respondents about their own daily life, their children's daily life, and their aspiration for their own and their children's future.

The interviews--lasting from one to three hours--were administered in the informal setting of the respondents' homes or in a neighborhood apartment which had been rented. The interviewer, as well as his colleagues, were well known and were accepted into the neighborhood by the time the interviews began. Great care was taken to be frank and open with the neighborhood residents concerning the purpose of the project so that the legitimacy of our presence would not be looked upon with suspicion. Entry into the neighborhood was gained through the efforts of a local priest and a neighborhood leader who was also the superintendent of the building which housed the research apartment.

The informality of the interview situation was insured by the absence of note-taking. All interviews were tape-recorded after permission was granted by the respondent. The presence of the microphone was soon forgotten as the interview developed into an informal, relaxed conversation. Although the interviewer was in possession of an interview guide, attempts were made to maintain a conversational format throughout. It was not necessary to maintain any strict order of questioning. It was possible for each person to pursue topics of interest to himself, while the interviewer provided probes and direction in order to cover various predesignated topics. The interpreter who accompanied the interview (in those cases where respondents knew little or no English) was fully familiar with the interview guide, so that for those interviews in which Spanish was used a conversational rather than a question and answer format was also maintained.

Population Heterogeneity

As expected, constant interviewing conditions did not always obtain. The usual view is that a population such as the one here studied is rather homogeneous and characterized by "restriction of range" of attitudes, opinions and values. Our own observations and experiences revealed much more heterogeneity than expected. Some respondents were unable to discuss at any length the somewhat abstract topics of concern to the study. There were others, however, who had already intellectualized their attitudes, beliefs and feelings and who were able as well as willing to verbalize them. The fact that some topics when broached in certain ways were beyond the cognitive capacities of certain kinds of subjects was itself a significant finding as a result of the interview process.

This study was designed to examine differences as well as similarities in the study population. The fact that everyone did not and could not handle the interview questions alike was a good indication that such differences existed. Thus, many respondents were unable to explain how Puerto Ricans differed from other Hispanos even though they felt that they were "not all alike." Similarly, there was a great range in the ability (or willingness) of the respondents to discuss their world in abstract terms. Some replied that they wanted their children to know Spanish so they themselves, or their monolingual relatives, would be able to talk better with them (the children). This is a very direct and relevant answer to a problem which does concern many Puerto Ricans living on the mainland. However, another segment of the population sampled in this study obviously answered at a different level of conceptualization. They were able to talk about language and ethnic identity or the usefulness of bilingualism in today's rapidly shrinking world.

Thus some persons could only relate their answers directly to their own experiences. Often they were puzzled by the question because they had never thought of "language" in the abstract or of "being Puerto Rican" as a topic to be talked about or even thought about. Others had thought about such questions and had well formed opinions on a wide variety of topics covered in the interview.

Differences such as these are recognizable in the responses to each interview item. Thus a content analysis of the interviews was expected to provide a description of the sample population in terms of similarities and differences of expressed attitudes, beliefs and feelings.

Sample population

The thirty-two male respondents in this study were chosen from amongst approximately ninety Puerto Rican households living within a two block area in Jersey City, New Jersey. This was a poor neighborhood composed mainly of Puerto Ricans and a few Negroes. Among the Puerto Ricans there were a number of loose networks within which most people were acquainted. Although the neighborhood was rundown and many of the people were employed at low salaried jobs there was generally a stability about this population in terms of employment, neighborhood residence and marriage. A few of the families owned their own homes and were straining towards upward mobility, especially for their children, if not for themselves as well. The sample population interviewed was designed to be a cross section of this neighborhood in terms of education, occupation, and age.

The decision to interview only males in this attempt to study bilingual-bicultural attitudes, beliefs and opinions in an ordinary and largely unsophisticated population was made for a number of reasons. It was felt that it would be easier for the male interviewer to schedule interviews with males than with females. Traditional Puerto Rican norms do not permit a woman to be alone with a strange man. It was not known to what extent these norms would be operative but it was quite clear that many women would have refused to be interviewed by a male interviewer. In addition, any interviewer-respondent bias that might have existed was certainly more constant in interviewing male respondents alone than it would have been had female respondents also been interviewed.

Scoring, coding and data processing

Each interview was first transcribed, in order to facilitate content analysis. Those interviews which were in Spanish were then translated into English. A code sheet was prepared based upon the interview guide and pretested on a number of actual interviews, selected at random. Finally the interviews were carefully read and reread for content analysis coding. During this phase of the analysis the code sheet was revised to include pertinent items or options which had been missed when it was initially prepared. All interviews were coded by the author who had also conducted the interviews. A second coder randomly selected interviews for a check or inter-rater reliability. Very few discrepancies in coding were found. Any such disagreements were reviewed in conference and the coding sheet revised in order to obviate future coding disagreements. This process resulted in the establishment of more detailed criteria for item analysis coding and a sharpening of the option categories for each item.

After the coding was completed, three separate processing operations were performed on the data: (1) cross tabulations were prepared indicating the number of persons answering each option of every item in relation to respondent education and respondent attitude towards children's language usage at home; (2) a verimax orthogonal factor analysis was performed on all coded responses yielding a seven factor solution; (3) a Q analysis was performed on all individual response profiles, yielding a three group solution. The findings obtained from these analyses will be discussed in detail below, (a) in terms of those responses that are shared by the group as a whole; (b) in terms of those items which group together indicating how the respondents viewed the items as relevant to their own life; and (c) in terms of the responses of sub-groups within this obviously heterogeneous sample.

Participation in two cultures

It is not surprising to find that the Puerto Ricans sampled for this study are involved in and express a preference for aspects of American culture as well as aspects of Puerto Rican culture. Puerto Ricans living in and around New York are actively involved in both cultures. In the home and in the neighborhood a man appears to be surrounded by traditional Puerto Rican activities. As he travels further away from the center of his closely knit circle of family and friends, to work or to available recreational facilities, he often appears to be completely surrounded by a very different style of life. However, while there is a kernel of truth to both of these statements, they certainly do not tell the whole story.

In the first place life is not as discontinuous as these statements imply. The mass media represented by radio and television brings America right into the homes of most Puerto Ricans in our sample. In addition, Puerto Rican children attend schools alongside other American children and bring some of their school-based ideas and aspirations into the home. As for their neighborhoods, rarely do Puerto Ricans find themselves living in such segregated ghettos that they are not in constant contact with other Americans as they stroll down the street, go to or from their places of employment, shop, play in the parks, etc. At the same time Puerto Ricans throughout the New York area are seldom out of touch with other Puerto Ricans. There are almost 700,000 Puerto Ricans living in the New

York Northeastern New Jersey consolidated area (Kantrowitz and Pappenfort, 1966). Many of them work together and more often than not spend their social life together--in the park and at the beach, as well as at home and in their immediate neighborhood.

This sharing of two life-styles is real. A look at some of the interview data will help illustrate this fact. All but one of the interviewees participating in this study were born in Puerto Rico, and 65.6% of them expressed a real desire to resettle there. Everyone who was asked the question wanted their children to visit the Island. Nostalgic feelings about the Island were very strong. If this is the case, how do they explain why they migrated to this competitive and cold environment that so many of them dislike. "If I had the salary I would go back there" expresses the feelings of many. More than 50% of those interviewed said that the biggest change in their lives since moving from Puerto Rico was the opportunity that the New York area presented for earning a living. However, life in America is more than just earning a living, although striving for success may well be one major association that Puerto Ricans have to American life.

Column 1 of Table 1 refers to common, everyday activities such as eating, shopping, dancing and church attendance. Our respondents were asked whether they usually ate American or Puerto Rican food, whether they attended the Spanish language Mass or the English Mass, etc. The overwhelming number of respondents (71.9%) preferred more Puerto Rican behaviors (e.g., Puerto Rican and Latin dancing) to American behaviors (e.g., American dancing). The reverse is true of

TABLE 1

ETHNIC COMPARISON ON FOUR VARIABLES

American-Puerto Rican Comparison	VARIABLES 1	 2	 3	 4
Equal	12.5%	25.0%	16.0%	20.0%
American/English > Puerto Rican/Spanish	15.6	40.6	60.0	46.7
Puerto Rican/Spanish > American/English	71.9	34.4	24.0	33.3
N	32	32	25*	30*

Variables: (1) reported daily behaviors; (2) reported cultural participation; (3) respondent's report of children's behavior; (4) respondent's preference for children's behavior. Figures are percent of total sample in each column.

*These N's represent respondents without children old enough to engage in such behaviors.

cultural behaviors such as choice of newspaper and radio and television programs (column 2). Spanish language mass media do exist in the Jersey City Area. However, many persons felt that they were inferior in quality (especially the news coverage) to the English language mass media. It was also slightly more difficult to obtain Spanish language newspapers in the neighborhood under study (not all stands carried them) and it was necessary to have a television set capable of receiving UHF in order to tune in Spanish television programs.

The respondents were also asked to describe the activities of their children. Which language did they use most often in conversation with each other and with the respondent? In which language did they most often respond? Did the children prefer American or Puerto Rican food? Who were their playmates (Puerto Ricans or non-Puerto Ricans), and what activities did they engage in while at play? Respondents were then asked whether or not they approved the ethnic choice represented by their children's activities. Table 1, columns 3 and 4 indicate that the persons sampled viewed their children as engaging in more American activities than Puerto Rican activities. Furthermore, they preferred that their children do so, although by a somewhat smaller margin.

Column 3 may or may not represent the actual behavior of these children. What is important is the fact that the respondents have reported that their children like American food, speak English to each other, choose American playmates, etc. Their children are seen as representing a link with the new environment that older friends and relatives do not provide. The American culture is not avoided or rejected. In fact it may even be encouraged amongst the children. However, one's own familiar daily behaviors are hard to change; thus the difference between column 1 and columns 3 and 4 of Table 1.

Puerto Ricans obviously value aspects of both cultures, rather than valuing total commitment on one or the other alone. Table 2 illustrates this fact very nicely. Despite the nostalgia that adults have for their Island home, at present they are here to live and work, and it is possible to do so without losing what is essential to them. 75% of the sample saw no conflict between being a Puerto Rican and being an American. Only 9% felt there was any conflict (no response was elicited from the remaining 16%).

The interviews revealed an underlying optimism in regard to the interaction between the two cultures. There is no real fear that by interacting with American society, or by allowing one's children to do so, a loss of Puerto Rican identity will come to pass. Many people were aware of the possibility that their children might lose their ethnic identity, but only those few who felt this to be a desired condition also felt it could not be prevented. Furthermore, the large majority of the sample believed that most American born Puerto Ricans did speak and understand Spanish. They believed that it is the parents who have prime responsibility for the maintenance of Spanish amongst their children. As long as the family is intact and as long as the father retains some aspects of traditional authority, America is welcome in his home. 65.6% of the sample stressed their family responsibility without having been asked about it. It is part of this responsibility to nurture his children's Puerto Rican identity, as well as to provide food, clothing and shelter for them.

TABLE 2

RESPONDENTS' PREFERENCE RE SPANISH OR ENGLISH LANGUAGE USAGE AND RE PUERTO RICAN OR AMERICAN CULTURAL ORIENTATION OF THEIR CHILDREN

Language/culture	Respondents' attitude toward children's language usage	Respondents' attitude toward children's cultural orientation
Spanish/Puerto Rican	12.5%	10.71%
English/American	0	10.71
Both	87.5	78.57

The R factors

Thus far we have a very simplistic picture of the neighborhood and community life which is portrayed by our interview. A more complex picture is revealed in the factor analysis to which we now turn. The seven factors yielded by the factor analysis are named in Table 3 below. One of the factors, R_5, was not sufficiently clear to be named at this time. Only items with a factor loading of .47 or higher were considered in the naming of the factors.

Factor 1 represents daily Puerto Rican Behaviors. This factor is well represented by such items as 91, 92 and 89 (see Table 4), all of which deal with shopping. In addition to these, items 83, 84 and 85 also load high on this factor. These are, respectively, the total English (or American) responses on items relating to daily ethnic behaviors, total Spanish (or Puerto Rican) responses on these items, and the Puerto Rican-American comparison on these items. The American activities and totals all load negatively on this factor, whereas the Puerto Rican activities and totals load positively.

It is not surprising that shopping is representative of everyday behaviors. Not only do bodegas (grocery stores) stock food which is part of the traditional Puerto Rican diet (such as bacalao, plátano, green bananas, etc.), but they also represent something else equally important for the maintenance of a Puerto Rican life style. Within the bodega there is an atmosphere not available in the supermarket. The proprietor and most of the customers are Puerto Rican. Conversation is in Spanish and the pace of shopping is much less hectic than at the supermarket. Within such a shop in the winter (or just outside the store in the summer) a man may meet friends for conversation or

TABLE 3

THE SIX R FACTORS

FACTOR	NAME
R_1	Daily Puerto Rican behaviors
R_2	Attitudes, preferences and opinions
R_3	Puerto Rican hi-culture and Spanish language activities
R_4	Bicultural life style
R_5	(no name)
R_6	Puerto Rican solidarity on the Mainland
R_7	Mobility and education

TABLE 4

HIGH LOADING ITEMS ON FACTOR R_1: DAILY PUERTO RICAN BEHAVIORS

Item	Loading	Text
91	.73	Not shopping at supermarket
92	-.68	Reasons for shopping at supermarket
145	.66	Eng spoken with PRs to learn or teach it and when non-PRs are present
83	-.63	Total Amer/Eng responses for daily ethnic behavior
85	.60	PR-Am comparison (Hi = PR> Am on daily ethnic behavior)
134	-.60	Seeing fewer non-family PRs now
89	.60	Shopping at bodega because of convenience and other reasons
29	.58	Attempted to improve English at school
84	.58	Total PR/Span responses for daily ethnic behaviors
88	-.54	Not shopping at bodega
49	.48	Slang English differs by its vocabulary and pronunciation
3	.47	Getting out of house more now compared to 5 or 10 years ago

for a game of dominoes. Here, among friends and relatives, Puerto Ricans can engage in activities appropriate to the execution of the rights and obligations of their social structure.

Other individual daily behaviors such as dancing or music preference did not group together with the items in this factor. However, such behaviors are included in the totals (items 83 and 84) and in the Puerto Rican-American comparison (item 85) that load substantially on this factor. What of the other items on this factor that might not readily appear to have anything in common with the factor? Certainly those items with lower loadings seem to us to be less related to daily PR behaviors. However, it must also be remembered that the factor analysis operates upon the respondents' answers, regrouping them into a structure that may or may not be the same as that expected by the investigator. Item 145, which concerns the use of English with other Puerto Ricans, is just such an example. The intra-group use of English is, indeed, a daily Puerto Rican behavior in our sample. Since only 18.8% of our interviewees denied speaking any English with other Puerto Ricans, it would seem that the functional use of English (in order to learn or teach it or when non-Puerto Ricans are present) amongst Puerto Ricans is seen as related to other frequent daily behaviors. Item 29, "attempted to improve English at school" is also (though somewhat less) amenable to the above kind of interpretation.

All of the highest loading items on factor 2 are concerned with Attitudes, Preferences and Opinions. Of the 17 items on this factor having loadings greater than .47, only 4 (items 184, 135, 22 and 97) are reported behaviors, in contrast to the others which are

TABLE 5

HIGH LOADING ITEMS ON R_2: ATTITUDES, PREFERENCES AND OPINIONS

Item	Loading	Text
122	-.75	Total Eng/Amer responses - daily behavior preference of children/grandchildren
136	-.72	Total Eng/Amer responses - respondent's preference for child's daily behavior
120	.66	Daily behavior preference of child/grandchild - leisure time activities (Span - hi)
124	.63	Eng-Span comparison: behavior preference of child/grandchild (hi = Span > Eng)
119	.63	Daily behavior preference of child/grandchild - reading (Span - hi)
128	-.58	Respondent's preference for child's/grandchild's leisure activities - Amer activities
130	.57	Respondent's preference for child's/grandchild's friends (Span - hi)
184	-.55	Respondent's best friends - family
158	-.52	How PRs differ one to the other - responsible family providers vs. shiftless trouble makers
135	.52	Seeing fewer family now
70	.52	Concern about increasing non-Span speakers - nothing can be done about it
22	.51	Biling PR to whom Span was spoken recently (hi towards family)
67	-.49	Negative attitude toward non-Span speakers - because of loss of contact with other PRs
27	-.49	To whom is a better Eng spoken - no one, tries best, regards Eng as lo
138	.48	Eng-Span comparison: preference for child's/grandchild's behavior (Span > Eng = hi)

TABLE 5 continued

Item	Loading	Text
97	-.47	Cultural participation - TV (Span - hi)
101	-.47	Leisure time preference - more PR activities in PR locations

attitudes about behaviors. The respondents' report of their children's behavior ("daily behavior preference of children/grandchildren") may be considered to be a preference or attitude rather than a reported behavior. It is felt that answers to this type of question are as much influenced by the respondents' desires as by their knowledge of their children's activities. Except for "children's language usage with respondent," all other activities in this category (children's playmates, reading, etc.) are not necessarily readily observed by the respondent.

Item 27 is a hybrid between the two types of items because it involves a reported behavior--"I do not use a better kind of English with anyone"--and also an opinion--"I regard my English as poor." The other options to this question required much less intellectualization. ("To whom do you speak a better English?" was answered: "To no one" (no elaboration); "to Americans only"; "to educated Puerto Ricans and Americans"; or "to everyone.")

An examination of Table 5 reveals that factor 2 is best described as an attitudinal or opinion dimension. The major dimension involved is one of being more or less opinionated (thoughtful, intellectual, verbal or abstract). The ethnicity dimension of this factor (being more or less Puerto Rican) is only of secondary significance. Most of the more highly load items are in the direction of Puerto Rican ethnicity. The two top loading items (122 and 136) are English/American totals and they load negatively. The English-Spanish comparison for children's behavior and respondents' preference for this behavior is scaled, Spanish> American being at the top.

These two items (124 and 138) load positively. However, there are two items which indicate ethnicity in the opposite direction, but since these items (television viewing and leisure time preference, items 97 and 101, respectively) are right at the cut-off point of .47, little significance can be attributed to them.

Factor 3, Puerto Rican hi-culture and Language Activities presents no problem of interpretation. There are no contradictions of ethnicity. Every item relates to some Puerto Rican activity, or loads negatively if it relates to an American activity. Each of the activities refers to some aspect of hi-culture or to a language activity, except for three items with low loadings (items 13, 185 and 103). Table 6 readily confirms these observations.

The three top loading items involve "cultural participation." These items were grouped together in the interview guide and covered topics such as "regular newspaper reading," "popular reading," "other reading," "radio listening" and "television viewing." English and Spanish response totals were calculated for each respondent and these in turn yielded an English-Spanish comparison. Table 7 gives the distribution in the total sample for this comparison. The designation "English > Spanish" represents those respondents who reported participating in more of the above activities in English than in Spanish. These marginals are important, for they show that a larger percentage of the respondents practice more of these activities in English than in Spanish. Yet, the option "Spanish > English" had been scaled high and, as a result, this comparison loads positively on this factor. This means, for instance, that there is a high probability that any respondent with a scale score of 3 on item 100 (the English-

TABLE 6

HIGH LOADING ITEMS ON R_3:
PR HI-CULTURE AND SPANISH LANGUAGE ACTIVITIES

Item	Loading	Text
98	-.71	Total Eng responses - cultural participation
100	.66	Eng/Span comparison - cultural participation (hi = Span> Eng)
99	.64	Total Span responses - cultural participation
21	-.62	Bilingual PR to whom Eng was spoken (relatives hi - no Eng lo)
93	.62	Cultural participation - regular newspaper reading (Span - hi)
133	.55	Interview conducted in - (Span - hi)
72	.53	Respondents like being PR - yes emphatic
13	.52	PR leisure time activities
185	-.50	Respondents best friends are Americans
161	.49	Respondents' views of those not wanting to be PR are those not speaking Span and those denying their background
103	-.47	Leisure time preference - Amer activities and locations
62	.47	With whom will children speak Span - parents & relatives

TABLE 7

ENGLISH-SPANISH COMPARISON FOR ITEMS RELATED TO CULTURAL PARTICIPATION AS A PERCENT OF TOTAL SAMPLE

Comparison	Percent of Sample	Scale coding for factor analysis
English > Spanish	40.6	1
Spanish > English	34.4	3
Equal	25	2

Spanish comparison) also has a large total score for Spanish responses (item 99), was interviewed in Spanish (item 133) and has best friends who are not Americans (item 185).

This factor, therefore, tells us that there is something very special about a certain segment of the Puerto Rican population which was studied. Hi-culture language and related activities group together in the factor analysis indicating that part of the population studied prefers to engage in more intellectual, thoughtful activities as Puerto Ricans, rather than as Americans. As an example, one man preferred reading the Spanish language newspaper because it gave him news of Puerto Rico that was often not to be found in the English language newspaper. Other men read both papers, but the following (abridged) excerpt from the interview transcripts indicates that a man with strong intellectual interests often prefers operating with the language in which he is strongest.

Tape: G138, Respondent: 028

Interviewer: Why do you read it (the Spanish language newspaper)?

Respondent: I like it. I don't read good English. I read the English paper, too, sometimes.

Interviewer: Why do you read the English paper?

Respondent: To learn English.

Interviewer: If you had more time to read what kinds of things would you read?

Respondent: The Bible and some other books.

Interviewer: In what language?

Respondent: Spanish.

Thus factor 3 is representative of a dimension of Puerto Rican life which is involved with things other than the everyday activities of existence. This dimension will come into even greater focus as we examine the Q groups in the following section.

Factor 4 has few high loading items and does not present as clear a picture of the dimension it represents as do some of the other factors. There is, however, some indication that it represents a Bicultural Life Style. This is especially understandable in light of the introductory remarks about the biculturism exhibited by this group of respondents. Belonging to a non-Puerto Rican club (item 141) is an activity removed from the intimacy of the home. The friendships which are established there do not represent the same thing as the relationships one has within the networks that are closer to home. The two cultures each have their own place. That is why children should speak Spanish to each other (item 118), but they should have speaking knowledge of both languages (item 58). (See Table 8)

Item 166 indicates that those persons who endorse the items of factor 4 not only engage in activities appropriate to each culture, but are also aware of the differences. "Yes, some (those who want to be more Puerto Rican) always say that they are Puerto Rican and do Puerto Rican things and always speak Spanish and they don't know English." Thus, those who score high on this factor have an intellectual awareness of their Puerto Ricanness. However, this intellectual quality is not restricted to functioning within the Puerto Rican culture alone as is the case with factors 2 and 3.

Factor 5 contains the fewest items with high loadings, and it was extremely difficult to interpret. Table 9 gives the items

TABLE 8

HIGH LOADING ITEMS ON R_4:

BICULTURAL LIFE STYLE

Item	Loading	Text
141	.65	Belongs to non-PR clubs
166	.61	Recognizes those wanting to be more PR - by no Amer culture, PR behaviors, more Span than Eng
118	.54	Daily behavior preference of children - language spoken with each other (Span - hi)
86	.51	Respondents' compadre are friends, not family
56	-.48	Why speak better Span - ethnic pride and wider communication
58	.47	Wants children to speak Eng and Span

TABLE 9

HIGH LOADING ITEMS ON R_5:

UNNAMED

Item	Loading	Text
16	−.78	No Amer leisure locations or activities
71	.52	There is concern about Amer born PRs not speaking Span and something can be done about it
5	-.50	Hopes for the future - material things for self and family
28	.50	Better Eng is spoken to Americans and educated Americans and Puerto Ricans
34	-.49	Never tried to improve his Spanish

on this factor and their loadings.

Factor 6 is best described as Puerto Rican Solidarity on the Mainland. This feeling of common unity with other Puerto Ricans is expressed by many kinds of items. They are not restricted to daily (lo-culture) behaviors, hi-culture behaviors, attitudes or opinions. However, what is common to most of the items on factor 6 (see Table 10) is a sense of oneness with other Puerto Ricans living on the U.S. Mainland.

We already know that most respondents liked being Puerto Rican and found no conflict between being a Puerto Rican and being an American. The respondents who endorse item 160 are saying that they share this feeling with other Puerto Ricans. They perceive other Puerto Ricans as being satisfied with their ethnic identity just as they are. All Puerto Ricans are essentially seen as being the same.

We also see grouped in this factor two items associated with liking other Puerto Ricans (items 111 and 109). This also indicates Puerto Rican solidarity because the other possible options to the question from which this item came ("attitudes toward other Puerto Ricans") were "not liking other Puerto Ricans" or "being ambivalent toward other Puerto Ricans." Therefore, it is significant that "liking other Puerto Ricans" was the item that yielded a high primary loading on this factor.

Similarly, by not admitting that they speak a better English (item 47), the respondents answering this item are putting themselves on a level with other Puerto Ricans who are self conscious about their English. It is characteristic of many persons in this study to have a modest (realistic?) opinion of their own English abilities. 12.5%

TABLE 10

HIGH LOADING ITEMS ON R_6:

PR SOLIDARITY ON THE MAINLAND

Item	Loading	Text
7	.57	Hopes for the future - material and non-material for family
160	.57	Recognizes no persons who no longer want to be PR
111	.54	Reasons for liking other PRs
47	.52	Speaks slang English to everyone, commands no other but tries to speak better
54	-.51	Wants to speak better Eng because of better job opportunity
60	-.49	Children learned Span naturally, at home
151	.49	Good Span differs by its vocabulary
6	-.49	Hopes for the future - non-material things for self and family
90	.49	Shopping is done at the bodega - loyalty to PR business and for Span food
105	-.49	Generally likes Americans - no specific reasons
109	.47	Generally likes other PRs

denied speaking any slang English, whereas only 25% were aware of the difference between slang and some better variety, and admitted to having some control over the latter. Therefore, it is felt that those who report that they only speak a slang English are at the same time portraying themselves as similar to most other Puerto Ricans.

The reasons given for shopping at the bodega (item 90) certainly indicate a strong feeling for the maintenance of a Puerto Rican life style, as well as an allegiance to the business efforts of other Puerto Ricans. In the effort to maintain a Puerto Rican life style, one must also attempt to maintain Spanish. This is evident by the presence of item 60. One answer to "how did your children learn Spanish" ("at home,naturally," item 60) was negatively loaded on factor 6. The other responses to this question was "at home with instruction" and "no response". Those persons who endorse item 60 are less likely to endorse items that reflect a concern for Puerto Rican solidarity. Thus it can be inferred that they would be less concerned about the maintenance of Spanish and Puerto Rican solidarity.

Factor 7 is best described as dealing with Mobility and Education. Mobility describes the extent to which a man is moving or sees himself as moving up the socio-economic ladder. Socio-economic success need not be restricted to either American or Puerto Rican culture, but can tap both cultures. In general, mobility, as reflected by this factor, is associated with the use of proper language and also with education.

There is a high probability that those persons with a knowledge of what distinguishes slang Spanish from better Spanish (items 51 and 150) have also ideologized the usage of "proper" language. These persons report speaking a better Spanish to educated Puerto Ricans and other Hispanos (item 25) and they speak it (or say that they do) because of the social significance that is reflected by speaking better (item 57). Better speaking habits may be a means of upward mobility out of the lower class neighborhood in which this population lives. However, it does not mean that there is a desire to be disassociated from other Puerto Ricans. Those persons who feel more comfortable with other Puerto Ricans (item 114) also tend to endorse the other items of this factor.

Preference for American leisure activities is also associated with mobility and education (items 14 and 15). This is not necessarily a contradiction of item 114 mentioned above. In the first place, one can engage in such activities in the company of other Puerto Ricans. Secondly, if we go back to the interview itself, it becomes clear that "American" activities most often referred to cultural activities. American activities were interpreted by respondent and interviewer alike as referring to such things as museum and theater attendance. Parties at home or gatherings at the park were used as examples of Puerto Rican activities. "American" activities as they were referred to in the interview are really those that are practiced by educated, intellectually oriented persons of any culture. A poor man struggling for his daily sustenance rarely has the time or the energy for such pursuits, even if these are his interests. Therefore, persons endorsing item 15 are also those with more intellectual and educational interests, and are those with desires, at least, for upward mobility. (See Table 11)

TABLE 11

HIGH LOADING ITEMS ON R_7: MOBILITY AND EDUCATION

Item	Loading	Text
51	.64	Slang Span differs from better Span by pronunciation and vocabulary
150	.60	Better Span differs from slang Span by pronunciation and vocabulary
114	.56	With whom respondent feels more comfortable (PRs - hi)
14	-.54	Desires no change from usual PR leisure activities
57	.54	Speaks better Span so people will have a better opinion of him
154	-.53	Respondent is PR because of birthplace and parentage
153	.52	Respondent is PR because of birthplace
25	.52	Better Span spoken to educated PRs and other Hispanos
39	.50	Respondent learned Eng in school
15	.48	Desires no change from usual Amer activities and change from PR activities
110	.47	Likes other PRs because of ethnic and language similarities

The Q groups

The Q analysis of interperson correlations yielded three clusters of respondents. These groups are each comprised of persons who have similar response patterns on the interview questions. Therefore, a comparison of how each group responded to the items representing the several factors will reveal how the groups differ from each other. In addition, the Q groups were each compared on six demographic variables which were taken from a census of the larger population from which this sample had been drawn.

The demographic description of the Q groups is summarized in Table 12. Nearly everyone in our interview sample was a male head of household. Two college students, both male offspring, were also in Q_1. However, Q_3 was actually the youngest group. 88% of its members were younger than 35 years, whereas only 72.7% of Q_1 were below 35 years of age. Q_2 is generally older than the other two, nearly 60% of Q_2 being older than 35 years. Q_1 has a large age range and a bimodal distribution. Thus it has a significant number of persons above 44 years as well as below 25 years.

A similar situation obtains for years of education. 88% of the members of Q_3 have a high school education or higher, while only 72.7% of Q_1 have this much education. Q_1 also has more persons with no education or elementary school only than does Q_3. Q_2 generally has less education than the others.

The distribution of occupational levels was generally skewed toward the lower levels for the sample as a whole. The unskilled laborers and semi-skilled factory operatives are in the lowest level.

TABLE 12

PERCENT* OF PERSONS IN EACH Q GROUP DESCRIBED BY DEMOGRAPHIC INFORMATION

Demographic Information		Q Groups		
		Q_1	Q_2	Q_3
Family position:	Head of household	81.81%	100%	100%
	Male offspring	18.18	0	0
	Total	100	100	100
Age:	18 - 24 years	27.27	0	12.50
	25 - 34	45.45	41.67	75.50
	35 - 44	9.09	41.67	12.50
	45 - 54	18.18	8.33	0
	55 - 64	0	8.33	0
	Total	100	100	100
Education:	None	9.09	0	0
	Elementary	18.18	58.33	12.50
	Secondary	45.45	41.67	75.00
	College	27.27	0	12.50
	Total	100	100	100
Occupation:	Laborer, service worker, operative or welfare	45.45	72.72	75.00
	Blue collar, craftsman	18.18	27.27	0
	Self-employed, white collar (sub-professional)	18.18	0	12.50
	Professional and college student	18.18	0	12.50
	Total	100	100	100
Birthplace:	Cities > 10,000	36.36	16.66	37.50
	Smaller towns and rural areas	63.63	83.33	62.50
	Total	100	100	100

TABLE 12 continued

Years in USA:	< 5 years	9.09	8.33	12.50
	6 - 10	27.27	33.33	25.00
	11 - 20	54.54	58.33	62.50
	U.S. born	9.09	0	0
	Total	100	100	100

*Percents were computed on the following N's: $Q_1 = 11$; $Q_2 = 12$; $Q_3 = 8$. There was no census information available for one member of Q_1.

The occupational levels are arranged in Table 12 in ascending order of skill and job responsibility through sub-professional (clerk, laboratory assistant) to professional (minister, college students). It is not surprising that Q_2 which was lowest in educational level is also the group which is lowest in occupational level. Q_1 has a more even distribution over the entire range of occupational levels, and therefore is more professional and less unskilled than the others. Q_3 has a bimodal distribution with a great many unskilled workers (75%), as well as a few sub-professional (12.5%) and professional (12.5%) workers. Comparing the Q groups on the factor scores themselves will give some insight into the large number of unskilled workers that are in Q_3.

Birthplace and Years in U.S.A. were also cross tabulated with Q group membership. The latter variable did not greatly distinguish between the groups, most persons in the population sample having lived in the U.S. between 11 and 20 years. Only 3 persons have been in the U.S. less than 5 years (one in each Q group) while only one person (see Q_1) had been born in the U.S. Birthplace did differentiate slightly between the groups even though the entire sample population was skewed somewhat in the direction of smaller towns and rural areas. Q_1 and Q_3 were more similar in distribution to each other than to Q_2. They each had a greater percentage of members who were born in cities than did Q_2.

In summary, the demographic comparison of the Q groups reveals that Q_2 is most different from the others. It is the oldest, the least educated and on the lowest rung of the occupational ladder.

The major distinction that can be made between Q_1 and Q_3, however, is not via comparison of any measures of central tendency, for on these they appear to be similar. What does distinguish these two groups is that the scores of Q_3 are all more highly concentrated than are the scores of Q_1. The scores of Q_1 tend to be spread over a greater range on most of the variables. Thus it is composed of both young and old, more and less educated, professionals and unskilled workers.

The Q analysis is further enriched if each of the 3 Q groups is analyzed in terms of its responses on the six R factors described above. In order to do this a profile of each Q group was constructed utilizing the mean score on every item in the factor analysis that loaded higher than .47. In this way the Q groups could be ranked on each item and a mean rank calculated for each factor. A Q group with a high mean score on any factor made of positively loaded items endorses more of the items represented by the factor than do the other groups. The opposite holds for items which are negatively loaded. A group which scores high on such items endorses less of the dimension. Therefore, when calculating the mean rank of each Q group on each factor the ranks were reversed for the negatively loaded items so that direct comparisons between them and positively loaded items would be facilitated.

Table 13 reveals the profile of the Q groups derived from the above data. This table is meant to be an aid in the discussion that follows. It must be kept in mind that no effort was made to quantify the differences between ranks, nor was more weight given to those

TABLE 13

Q GROUP PROFILES ON SIX FACTORS

Factor	Q Group		
	Q_1	Q_2	Q_3
R_1 Daily PR behaviors		LO	HI
R_2 Attitudes, preferences and opinions		LO	HI
R_3 PR hi-culture and language activities	LO		HI
R_4 Bicultural life style	HI		LO
R_6 PR solidarity on the Mainland	LO	HI	
R_7 Mobility and education	HI	LO	

items with higher loadings. Table 13, therefore, provides us with basic preliminary orientation which must be extended by considering specific items on each of the factors (Table 14).

Q_1 individuals can be characterized as being relatively upwardly mobile and more concerned with education since the members of this group score relatively high on the two items representative of factor 7. However, perhaps precisely because they are relatively educated and upwardly mobile, their hi-culture activities are non-Puerto Rican. Again reference to Table 14 reveals that on factor 3, this group has a high mean score on American cultural participation. Nevertheless, Q_1 members score lowest on the English-Spanish comparison (item 100) where a high score means that more Spanish or Puerto Rican cultural activities were reported than English or American activities. Furthermore, the scores on factor 6, Puerto Rican solidarity, support the hypothesis that the people in this group have begun to move away from a totally Puerto Rican life style, but have not done so completely.

It is not surprising that Q_2, whose members are the least educated, ranks lowest on the mobility and education dimension (R_7) and the dimension that reflects Puerto Rican attitudes, preferences and opinions (R_2). That they are the least intellectual of the 3 groups is evident. However, it is curious that these people also rank lowest on factor 1, daily Puerto Rican behaviors (for rankings see Table 13). This seems especially problematic since this group also ranks highest on Puerto Rican solidarity.

It appears that the people who are members of Q_2 are characterized by an attempt to acculturate to the American style of life.

TABLE 14

TWO HIGH LOADING ITEMS FOR EACH FACTOR AND THE MEAN SCORE OF THESE ITEMS FOR EACH Q GROUP

Factor	Item	Text	Q_1	Q_2	Q_3
R_1	92	Shopping at supermarket	.67	.75	.38
	83	Total Am/Eng responses for daily ethnic behavior	1.58	1.33	.50
R_2	122	Total Eng/Am responses on items relating to child's daily behavior	.92	3.75	.50
	124	Eng-Sp comparison - behavior preference of children (hi = Sp Eng)	2	1	2.38
R_3	98	Total Eng/Am responses on items relating to respondents' cultural participation	1.92	.92	.50
	100	Eng-Sp comparison on items relating to respondents' cultural participation (hi = Sp Eng)	1.25	2.08	2.75
R_4	141	Belongs to non-PR club	.17	.08	.13
	118	Daily behavior preference of children - language spoken with each other (Sp = hi)	2.25	1.83	2.00
R_6	160	Recognizes no one who no longer wants to be PR	.75	.75	.63
	111	Reasons for liking other PRs	.17	.42	.38
R_7	51	Slang Span differs from good Span by pronunciation and vocabulary	.25	.08	.13
	25	Better Span spoken to educated PRs and other Hispanos	.25	.17	.38

They report that they are involved in various American activities, and certainly want their children to live the American way. Yet they are marked by a feeling of insecurity in this endeavor and must group together with other Puerto Ricans. Persons in this group may feel awkward acting "American" amongst Americans, but can do so with ease among Puerto Ricans who are similarly inclined.

Q_2 members can be pictured as persons who are caught between the two cultures yet who feel more at ease amongst other Puerto Ricans. Q_1 members have also made the step towards bridging the two cultures. These people, however, feel more comfortable in both. Intellectual endeavors and economic mobility can be pursued in the English speaking world, yet Spanish language activities need not be entirely rejected. They have in fact been put to use in the service of mobility as the two items presented for factor 7 on Table 14 illustrate.

Q_3 presents a different picture than either of the other two groups. Persons in this group are not so inclined to acculturate. Perhaps this is because they can intellectualize their Puerto Rican heritage and thus live comfortably with it. The unskilled and uneducated members of Q_2 might feel more pressured by the dominant culture around them. For the members of Q_3 the Spanish language and Puerto Rican hi-culture activities become important means towards the maintenance of a way of life that they desire. And the reciprocal is true, too: the behaviors of factor 1 also make it easier for the maintenance of spoken Spanish.

In summary, we see that the three Q groups can be meaningfully differentiated along the dimensions represented by the six factors.

Two of the groups are attempting acculturation. Of these two, the group with more education appears to be most at ease amongst Americans. The third group has not accepted the American life style, neither in everyday behaviors nor in intellectual activities. They, too, are comparatively well educated, yet have fewer persons in high level occupations. They are younger, yet less upwardly mobile. This is understandable because there is limited opportunity for mobility within the Puerto Rican community. Those persons who do strive upward are of all ages and include the educated and the uneducated. What such persons do have in common is greater acceptance of American culture, at least in the educational and intellectual spheres where English and American norms will be most helpful.

Conclusions

This description of a specific Puerto Rican population on the U.S. Mainland has revealed how inaccurate it is to say that all Puerto Ricans are on their way to acculturation, or that contact with the dominant culture results in the disintegration of traditional social and cultural patterns. Acculturation does not have to be distinctive, nor does contact necessarily result in acculturation. Most Puerto Ricans in this study were attempting to acculturate, some more completely than others. However, even with the acceptance of American cultural norms in certain behavioral domains, no one in the study neighborhood totally rejected his Puerto Rican heritage. It is believed that this ability to engage in the activities of both cultures will result in the maintenance of both for a long time to come.

The technique of factor analyzing enabled us to complement the technique of participant-observation used in a prior study. The factor analysis permitted the responses obtained to restructure themselves rather than merely to follow the structure of the interview. From this restructuring we were able to see what matters appeared to be related to each other from the respondent's point of view. One of the factors obtained (R_4) clearly reflects the bicultural nature of Puerto Rican life; however, all the other factors are relatable to this dimension, indicating its centrality for an understanding of "life in the neighborhood." We have found that our respondents view daily behaviors as being closely related to the Puerto Rican activities (see Table 4, R_1) and that they view education and mobility as related to more American activities (see Table 11, R_7). Even for a working class population such as the one we studied Puerto Rican hi-culture activities are viewed with sufficient clarity to cluster together in one factor (see Table 6, R_3).

The Q analysis provided further understanding of the cultural values that our subjects attached to the various activities covered by this interview. Some people maintain their Puerto Rican identity by attaching great importance to their friendships and associations with other Puerto Ricans. Others stress ethnic behaviors and reinforce their ethnicity with Puerto Rican hi-culture activities. Others still manage to retain their Puerto Rican identity while successfully integrating into the mainland culture. However, the common thread running through each of these situations is that for each group there is some behavioral domain, or group of domains within which Puerto Rican behavior and identity are preserved.

Education and Home are the domains which have emerged most clearly from this study. In addition, "solidarity on the mainland" (factor R_6) suggests a domain which touches upon interactions with Puerto Ricans other than those in the immediate family. It is this feeling of solidarity with other Puerto Ricans that makes "life in the neighborhood" a bicultural experience. It transcends the family but it does not capitulate to the lures of education and mobility.

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Chapter
III-2-b

SOCIOLOGICAL INTERVIEW

Tape G161

G = Interviewer
M = Translator
R = Respondent
T = Translation

G. Now first I'd like to know whether you think your life has changed any in the last 10 years? Do you think your life is any easier or is it more difficult? What is your opinion of this?

R. It's more difficult in last 10 years.

G. Now it is more difficult?

R. Right.

G. In what way is it?

R.. Yes, because before, 10 years maybe 6 years I live (unintelligible) I live in better condition.

G. Were you in Puerto Rico at that time?

R. No, here.

G. You were here.

R. I work for a long time, 19 years, in this country and New York too.

G. And six years ago you had better job. Things were easier ten years ago.

R. Maybe my age you know is something because I am a young fellow, but not now. I'm too old sometime I go to looking for a job. They see my face and say, no we have somebody now.

G. It's more difficult for you to get a job now. How does it compare to when you were in Puerto Rico? Now, is it more difficult now than when you were in Puerto Rico?

R. No, for me, no. For me, I can live better there because I think, because I was there about 1 1/2 year ago and I find a good job but I have the family here and I have to come back.

G. You had to come back. So when you were in Puerto Rico 10 years ago it was easier for you?

R. No, no. Because I come from Puerto Rico about 19 years ago.

G. Oh, 19 years ago, so it was many years ago.

R. Yeah, but I go there maybe about 1 1/2 and I find too many job for me. But I can't work over there if I go alone and I have the family here. I work there I think 7 or 8 months in Puerto Rico. Better money there because over there I collect over 100 dollars and here I collect too but I have more expenses, understand what I mean.

G. It's easier to live in Puerto Rico.

R. Right.

G. Do you think that you're interested in more things now than you were 10 years ago? Do you do more things? Do you have more interests now?

R. I don't understand.

M. ¿Que si Ud. tiene mas intereses ahora, cosas adicionale que haces ahora de que hacía antes?

R. No mas ó meno es lo mismo. It's the same.

T. No more or less, it's the same.

G. The same, you don't get out of the house more now to see different things?

M. ¿Ud. no sale de la casa ahora a ver más cosas que hacía antes ó sigue haciendo siempre lo mismo?

R. No siempre lo mismo.

T. No, always the same.

M. He says, no, he always does the same things.

G. Do you see more of the family now or people who are not members of the family now?

R. I have more member of the family now.

G. Do you visit them more now than you did ten years ago?

R. Yeah.

G. You do have more contact with them. And how about people who are not Puerto Rican? Would you say you see more non-Puerto Rican people now than you did ten years ago?

M. Que si Ud. ve más gente que no son puertorriqueña. ¿Gente americana que lo que veía antes?

R. Oh no, I don't see.

M. ¿No ve gente americana?

T. You don't see American people?

R. Veo pero no veo diferencia. I think it's the same before.

T. I see, but I see no difference.

M. Ud. en Puerto Rico veía gente americana también.

R. Sí.

M. He says he sees them the same in both places because in Puerto Rico he used to see American people there and he sees American people here.

R. In Puerto Rico you have more from all the countries you know, more now than before. Quiero decirle que ahora hay más gente no americano de toda parte hay mucho más gente que lo que habían que lo que habían.

M. Pero el quiere saber que si Ud. tiene mas contacto ahora con los americano de lo que tenía 10 años atrás.

R. Oh yeah, sure.

M. Oh yes, he does have more contact here than he did 10 years ago.

G. In what way? At work or as friends?

R. No, in all the places.

G. In all the places.

R. Right.

G. What do you wish for the next 5 or 10 years? What are your hopes for yourself and for your family?

M. ¿Qué, qué Ud. aspira para los 10 años que vengan?

R. ¿Para los 10 años próximo?

M. Próximo. Para su familia y para Ud.

R. Yo aspiro muchísimo pero quizá no puedo para tanto.

T. I aspire for a lot but maybe I can't for so much.

M. He says he aspires for a lot but he doesn't know if he could get all of it.

G. What do you want for your family?

R. Dígale Ud. que yo le voy hablar en español porque, sabe. Yo realmente tengo esta familia pequeña. Tengo estos 3 niños que son todo menó de edad. Y realmente me veo en dificultades porque. Tengo otros problemas que realmente me agobian y hoy en la actualidad pue no gano dinero suficiente que ganaba ante. Tengo que sostener esto y tengo otros problemas porque tengo que mandarle $25 semanales a la propia mujer mía porque esto son otros niños que tiene y yo (unintelligible) durante 8 años ó 9 que va que tengo esta mujer. Pero aún soy casado con otra y la tengo que sostener por la corte, tengo que mandar $25 a la semana. (unintelligible) difícil porque si gano menos dinero que el que ganaba ante tengo que afrontar aquella situación y afrontar el hogar de aquí. Aspiro muchísimo, yo me gustaria tener una casa ó tener un buen apartamento, si yo me fuera para Puerto Rico, me guataría tener una casa porque allá hay mas facilidades de alquilar pero no puedo me veo (unintelligible) porque lo que gano no me da para (unintelligible) gasto de irme allá, me gustaría irme para allá.

T. Tell him I'm going to speak in Spanish. I have a small family. I have 3 small children who are minors and I find myself in difficulties because I have other problems. I have to support my real wife and send her $25 a week and I don't earn enough for this. It's been 9 years that I have this wife, but since I'm married to the other one I have to support her by order of the court. (unintelligible) and this is difficult because I earn less money than I did before. I have to face the situation here and the one there. I aspire a lot. I would like to have a house, or have a good apartment; if I ever went to Puerto Rico I would like to have a house because it's easier to get one there but I can't (unintelligible) because what I earn is not enough to (unintelligible) expenses to go over there, I would like to go over there.

M. He says that you know right here he has a small family but this isn't his first wife. This is his second wife and he has to. He doesn't earn enough money to do anything because he has to give $25 to the wife that's in Puerto Rico because (unintelligible).

R. She live here.

M. Oh she lives here. Also so he says he aspires for a lot but that it's very difficult for him to get his aspirations because he says it would be easier if he goes to Puerto Rico because he could get a house there and it's easier to live there but he says the money that he makes now is too little for him to support his family.

G. You would like a house for your family?

R. That's the best I want for them. Not for me I want for them because maybe my life is short but I'm going up now and I want to make something for them.

G. And it would be very difficult to get a house here you think.

R. Well, that's the problem I have here, is because I can take a house in someplace but I am 60 years old and nobody want to give me a house on credit because you know about the problem, I can't pay for that. For that I can't take a house in some place in this country.

G. Okay. Good. Now I'm also interested in who you consider your best friends. Now not the names, this isn't important but are your best friends, people from the neighborhood or your relatives or are they people in Puerto Rico. First who are your best friends.

M. ¿Quienes son los mejores amigos de Ud., gente en Puerto Rico, aquí, en otros sitios, en otras partes?

R. In Puerto Rico because over there I have family and here I have to have some friends too but the friend is not the family it's different.

G. Yes.

R. And I have some family here in New York but they have, some of them have business and some work in some place but I don't count with them for nothing you know.

G. You do have some friends here in Jersey City?

R. Some what?

G. Friends. You do have friends in Jersey City?

R. Not too much because alway I live in Jersey City for about maybe 7 years, but I live here and I work in New York all the day, the work hours I stay there and I come here only for sleep. I don't know too much people.

G. So most of your friends are in New York?

R. Right.

G. How long do you live here?

R. Here in Jersey City for about 5 years. Before I live in Freehold, New Jersey for about 5 years.

G. How often would you say you do see your friends?

R. Some fellows here maybe 3 or 4 days and in New York every 15 or 20 days.

G. Where do you usually meet your friends? Do you meet them at home at their home, at work? Where do you meet them?

M. ¿Adonde se reune Ud. con sus amigos?

R. En las casas de ello otras veces la mía.

T. Sometimes in their home sometimes in mine.

M. Sometimes in their home and sometimes in his home.

G. And when you do meet them what do you do?

M. ¿Que hace Ud. cuando se reune con ello?

R. Speak. We say bla, bla, bla.

G. Do you belong to any clubs or organizations?

R. No.

G. No social clubs? No home town clubs?

R. No.

G. Do you and your wife ever go away to the movies or to the beach? How do you spend your free time?

R. Maybe one or 2 times in the summer.

G. You go to the beach?

R. Yes.

G. You ever go to the movies?

R. Never go to the movies.

G. Do you take the children with you when you're going?

R. Yeah.

G. Would you say that most of your free time is spent visiting with other members of the family or do you usually stay here in this apartment?

M. ¿Que si en su tiempo libre visita su family o si se queda aquí?

R. No, me quedo aquí.

T. I stay here.

M. ¿Visite a su familia?

T. Do you visit your family?

R. No, ello no me vistan a mí y yo no los visito a ello.

T. No. I don't visit them, they don't visit me.

M. He says that he spends most of his time here but he doesn't visit his family and they don't visit him.

G. (Pause) How often do you meet with non-Puerto Rican people?

M. ¿Como cuantas veces Ud. se reune con gente que no son puertorriqueña, americana?

R. Con la excepción del trabajo.

T. With the exception of work.

G. Just at work?

R. Right.

G. But do you work with American people?

R. Yeah.

G. What sort of work are you doing now?

R. I am a cook.

G. The people who work with you are American?

R. All American, Irish, Polish.

G. But you never visit their home and they never visit.

R. No, they don't come.

G. They don't come here?

R. No.

G. (Pause) What work did you do in Puerto Rico?

R. All my life I work in a restaurant.

G. What kind of cook are you?

R. Any kind.

G. Short order.

R. All the kind cook. For 35 years I cook Spanish American, Mexican, International, French, Chinese.

G. You like to cook?

R. I like.

G. Do you cook here or your wife cook?

R. Sometimes I cook here, yeah. I like make something special I no like make the food we eat every day but something special I make.

G. What is your favorite when you're working? Do you have some speciality.

R. Yeah.

G. What is your specialty?

R. I have too-many specialty because we have for example in Spanish we have paella.

G. Paella. With the fish, the shrimp?

R. Right, all the seafood mix with the rice is very good. I have too many.

G. Are you working in a Spanish restaurant now?

R. No.

G. You don't have a chance to make paella?

R. No, because in the place where I work too many American people like that specialty.

G. Oh, it's on the menu?

R. Yeah. One time a week sometimes I make it.

G. Oh where is this maybe I come someday?

R. 33rd Street and 3rd Avenue.

G. And what's the name of the restaurant.

R. Martell Restaurant.

G. And on Friday you serve paella?

R. Yeah.

G. I'll keep that in mind. Maybe I'll come some day. I like it very much. We're also interested in language. Could you tell me about a time you spoke Spanish today? Did you speak Spanish today?

R. I speak Spanish today.

G. To whom did you speak Spanish?

R. Some of the boys working with me.

G. Are they Puerto Rican boys?

R. Yeah.

G. Could you tell me what you were speaking about?

R. In relation with the work because I am the 1st cook. They are the helper and I have to give the order in Spanish for them.

G. Do you always give the order in Spanish to them?

R. To them yeah.

G. They don't speak English?

R. No.

G. Can you think of a time you spoke English today to a Puerto Rican?

R. Oh yeah.

G. And to whom was this?

R. To the boss and the other fellows.

G. Are they Puerto Rican, the boss?

R. No.

G. I mean was there a time you spoke English to a Puerto Rican?

R. Two boy working with me.

G. They are Puerto Rican?

R. Yeah.

G. And you did speak English to them?

R. No, they don't speak English.

M. ¿El quiere dice que se Ud. le hablo a un puertorriqueño hoy inglés?

R. No.

M. ¿Le habla en español?

T. You speak to them in Spanish?

R. En español porque los dos que trabajan conmigo no saben inglés.

T. In Spanish because the 2 that work with me don't know English.

G. How about yesterday?

M. ¿Ayer o anteayer? ¿Ud. puede pensar en algún día que Ud. le habló inglés a un puertorriqueño?

R. No me recuerdo.

T. I don't remember.

M. He says he does recall a time when he spoke English to a Puerto Rican.

G. Is there any? Do you ever speak English to a Puerto Rican? Do you ever speak to your wife in English or is it always in Spanish?

R. In Spanish.

G. Always in Spanish. Is there ever, can you ever remember having spoken English to a Puerto Rican person?

R. No.

G. When ever you meet with a friend or any other Puerto Rican it's always Spanish?

M. ¿Que cuando Ud. se reune con cualquier puertorriqueño ó cuando ve a cualquier puertorriqueño en la calle siempre le habla en español?

R. En español sí. Por lo regular nosotros costubramos cuando nos reunimos entre hispano hablamos español. El inglés lo dejamos cuando lo necesitamos para alguna persona que no hable español.

T. Yes, in Spanish. We are accustomed that when we meet with Spanish people to speak Spanish. The English we leave for when we need it for a person who doesn't speak Spanish.

M. He says normally when he sees the people he always speaks to them in Spanish because it's the custom of the Puerto Rican that when you know your English you reserve it. You only speak it to people who speak English.

G. What would happen if you were to speak English to the two boys that you work with? What would they say? Do they understand any English at all, these boys?

R. No.

G. They don't speak any English at all. Okay. Do you ever try to talk a better kind of Spanish, español mejor to anybody?

M. ¿Que si Ud. trata de hablarle a otra persona un español mejor?

R. Bueno si yo hago lo posible cuando hablo español, cuando estoy hablando español hablarlo lo mejor posible. Ahora el inglés me interesa hablarlo.

T. Well yes. I when speaking Spanish speak it as best as I possibly can. The English I'm interested in speaking.

M. He say yes, he tries to speak a better Spanish all the time. And that in English he likes to speak it.

G. But are there certain people that you always speak a buen español?

M. ¿Hay algunas personas que Ud. le habla el español mejor, el español fino?

R. No.

G. The same. You only speak one kind of Spanish to everybody, to the family or to people you meet on the street, to people you work with, everybody?

R. Right. The same.

G. Now you say you try to improve your English by speaking. Is that what you said? Do you do this to everyone you speak to, or do you speak one kind of English to...

R. Only one because the little I know that's the only one I can speak.

G. You only know the one. All right. Do you wish that you could speak a different kind of English?

M. ¿Que si a Ud. le gustaría hablar otra clase de inglés?

R. A mí me gustaría hablarlo perfecto.

T. I would like to speak it perfectly.

M. He says he would like to speak it perfectly.

G. Who speaks perfecto. Who speaks English?

R. Perfect I think the English people but here English is different from the Puerto Rican. The Puerto Rican people the speak very good English because they study English in the school.

G. Excuse me, who does this?

R. The Puerto Rican people. They speak English perfect.

G. The ones.

R. Some come from there maybe from the university and the high school and they can't speak over here because the English here is different than the English they learn in the school there.

G. This is the kind of English you would like to learn?

R. Yeah.

G. The kind that they teach in the University of Puerto Rico.

R. Right, because before come from Puerto Rico I learn little English there because I work in American restaurant and hotels and I wrote English there. The menus and everything. For some words I make good pronunciation and for some words no good because some words I learn here and some from the English I learned there.

G. So the better English you learned there?

R. Over there is better.

G. Do you want your children to speak Spanish?

R. Well, I want for them the two language because live in this country suppose to be the English is better for them.

G. But you think that they should know Spanish?

R. Oh they suppose to. I teach them.

G. Do you think they will know Spanish?

R. Yeah, I teach the Spanish here and I leave the English for the school.

G. I see.

R. They speak here in the Spanish.

G. When they grow up with whom will they speak Spanish?

M. ¿Que cuando ello sean grandecon quien van hablar el español?

R. Just in the house.

G. In the home?

R. In the home because all the boys around here, when come here they forget the Spanish. They you know the child they speak Spanish but they don't write Spanish. That's the problem. Have the child not when small but when they're growing up maybe after 15 years they don't can't write in Spanish, only in English.

G. After 15 they will forget it you say?

R. Yeah. Esto lo digo yo por experiencia porque me ha dado con mucho muchachos que han sido relacionado en la familia y amigos. Que hay muchachos de 15 años y delante hablan disparates en español porque no saben, no es que no lo quieren hablar sino es que no lo saben, se le ha ovidado.

T. I say this through experience because I have met many from the family and friends. There are people of 15 years and over that speak all jumbled in Spanish because they don't know. It's not they don't want to speak it, it's just that they don't know it or have forgotten it.

M. He says he's had experience with 15-year-olds, that he says that after 15 they don't know how to speak Spanish, they mess it all up.

G. What can you do to teach the children? What can you do so that the children will speak Spanish after they grow up? After they're 15 and older?

R. Nothing because the best way they teach in the school too but we can't make anything in the house we can teach to speak but not to write because they have to, their mind you know in the schools, in the lesson in the school but they don't want to take lesson in the house because no take the interest.

G. So you mean after they get older they no longer speak in Spanish also? They don't speak or write Spanish the children? I don't understand whether you're saying they forget, they don't have to write Spanish or is it also the speaking that you're saying?

R. Right, yeah because.

M. ¿El quiere decir que si también se le olvida el español y que también no pueden escribirlo?

R. Si. No escribirlo olvídate que ello no aprenden. Ahora estos muchachos que yo tengo aquí yo lo enseño aquí por ejemplo aunque no vale la pena enseñarlo pero cuando van a escuela pue el español ello no saben escribirlo. Ello no saben escribir en español ni la palabra "papá" aunque se escribe igual en inglés, porque es que no lo saben.

T. Yes. Writing forget it because they can't. The children I have here I teach them for example although it's of no use to teach them because they forget it. They can't write in Spanish not even the word "papá" which is written the same way in English because they don't know it.

M. ¿Ud. le enseña a los hijos de Ud. escribir español aquí?

T. You teach your children how to write in Spanish here.

R. Se le enseña, sí.

M. He says they'll speak Spanish but they'll mess it up. But he says forget about the writing because he says he's trying to teach his kids over here how to write Spanish but it's hard for them to learn it.

G. But they will speak but they'll speak a poor Spanish?

M. ¿El dice van hablar español pero un español malo?

R. Malo exactamente si.

T. Yes. Exactly bad.

G. Are there some children who are born in this country, in the U.S. who don't even speak Spanish? Are there some like this?

R. Yes. Some people speak Spanish too and they write because some child they go to school and they have some class in Spanish too.

G. These do. But are there some who do not speak Spanish at all?

R. No.

M. ¿Que si hay alqun puertorriqueño que no sabe ni una palabre en español?

R. No. Por lo regular el puertorriqueño que tiene familia, que la familia son puertorriqueña ello aprenden en la escuela el inglés y lo oyen en la calle pero siempre el hablarlo en la casa se practica.

T. No, because the Puerto Rican who has Puerto Rican family learns how to speak Spanish in the home and they practice it.

G. They do speak Spanish in the home?

R. Right. In the home they practice the Spanish and they listen. They don't can't write Spanish.

G. So they all speak even if it's malo?

R. Right.

G. Are you Puerto Rican?

R. Yes sir.

G. And what makes you Puerto Rican? Why are you Puerto Rican?

M. ¿Que porque es Ud. puertorriqueño?

R. Because I was born there.

G. Because you were born in Puerto Rico?

R. Right.

G. Is it sufficient to be born in Puerto Rico to say, yo soy puertorriqueño?

M. ¿Si es suficiente ser nacido en Puerto Rico para ser puertorriqueño?

G. Or do you have to know certain things and do certain things?

R. Ahí es una pregunta que yo no se pero si creo que el verdadero puertorriqueño es nacido ahí. Ahora muchos nacido aquí se mantienen siendo puertorriqueño porque su familiares son puertorriqueño su papa y su mama. Pero son puertorriqueño americano vamos a decir pero sin embargo yo creo que el verdadero puertorriqueño es el que fué nacido allí.

T. That's a question I don't know but I think that the real Puerto Rican is born there in Puerto Rico. But many born here are still Puerto Rican because their family is Puerto Rican but I still think the real Puerto Rican is the one born there in Puerto Rico.

M. ¿El también quiere saber que si Ud. crée que hay que hacer otras cosas diferente o tener unas costumbres diferente por uno decir que uno es puertorriqueño?

T. He also wants to know if you think you have to do certain things, believe certain things to say you're Puerto Rican.

R. Oh no.

M. ¿Ud. creé que es suficiente no más que ser nacido allá?

T. You think it's sufficient just to be born there?

R. Nacido allí. Después que uno es nacido en Puerto Rico es puertorriqueño.

T. Born there. As long as you are born there you are Puerto Rican.

M. He says once you're born in Puerto Rico you're Puerto Rican. And he says that some of the Puerto Rican children that are born here they still maintain that they're Puerto Rican because of their families which are Puerto Rican.

G. All right. Do you like being Puerto Rican?

R. Oh sure.

G. It's not a headache or a bother to you?

R. That's the best for me.

G. And is it important to know Spanish to be puertorriqueno?

M. ¿Que si es importante saber español para ser puertorriqueño?

R. No. Some Puerto Rican speak English.

G. And they don't know Spanish?

R. They know Spanish too but you know they come here and some child come small from Puerto Rico, they born there but come here and they learn the English and never speak Spanish. They are Puerto Rican.

G. They're still Puerto Rican. Is being a Puerto Rican different from other hispano?

R. No.

G. They're the same?

R. The same.

G. Same customs?

R. The same.

G. Are there different kinds of Puerto Ricans or are all Puerto Ricans the same?

R. Well. I think all the Puerto Ricans is the same because we dón't have...tu sabe lo que yo quiero decir que creo que en cuanto a ser puertorriqueño todo somos iguales que no hay diferencia porque allí no existe racism allí y negro con el blanco todo vivimos. No hay diferencia entre nosotros.

T. You know, I think all Puerto Ricans are the same that there is no difference, because there is no discrimination over there, we all live together the white and the Negro Puerto Rican. There's no difference between us.

M. He says that there's no difference in Puerto Rico. You, that the Negro Puerto Rican and the white Puerto Rican lives together and that there's no difference that they're very united.

G. So all Puerto Ricans are the same?

R. The same.

G. Are there any Puerto Ricans who no longer want to be Puerto Rican?

M. ¿Que si hay algun puertorriqueño que no quiera ser puertorriqueño?

R. Bueno. Yo creo que no lo habrá porque ello aunque hay distinto ideales pero todos queremos ser puertorriqueño.

T. Well. I think that there are but even though there are different ideas we all want to be Puerto Rican.

M. He says that he feels that even though there are different ideals in every Puerto Rican a lot of them still say they want to be Puerto Rican.

G. Nobody says I don't want to be Puerto Rican any more?

R. No. I no think.

G. Are there any Puerto Ricans who constantly stress that they're Puerto Rican? Who want to be more Puerto Rican than other Puerto Ricans?

M. ¿Que si hay algun puertorriqueño que trata de ser más puertorriqueño de lo que es? ¿Que siempre están diciendo yo soy puertorriqueño?

R. Bueno. No se le da crédito porque son personas que en todas las nacionalidades hay diferenciar entre una persona y otra ve que cada uno piensa de su manera. Hay otros que se creen más superior a las demás pero a eso nosotros no le damos importancia. En todo los grupos lo hay. Esa persona no son mejor que los otros.

T. Well. We don't give them credit because they are people that are found in all nationalities. Every person thinks his own way. There are some who think themselves more superior to others but to those we pay no attention. In every group you have them. Those people are not better than the others.

M. He says that there are some Puerto Ricans who say this but that he feels that they're trying to be superior to the other Puerto Ricans but he says the majority of the Puerto Ricans doesn't allow himself to feel inferior to the Puerto Rican who stresses that he's Puerto Rican. They just don't bother with him.

G. How does the person act, who - How does he act superior as a Puerto Rican? What does he do?

M. ¿Que hace esta persona para ser superior?

R. Nada. Porque nada mas que bla bla bla. That's all. They don't make nothing more.

T. Nothing because its nothing more than just bla bla.

M. He says they don't do anything but talk.

G. He talks too much.

R. Yeah.

G. Do you find that at times being both Puerto Rican and American, is sometimes a problem for you?

M. ¿Ud. creé que siendo puertorriqueño y americano es un problema?

R. No. Yo no creo que tenga ninguno.

T. No. I don't think I have one.

M. He says he has no problem.

G. Do you sometimes do things which are American?

M. ¿Que si Ud. hace algunas cosas que son más que americana sola?

R. Oh si.

T. Oh yes.

M. Cuales.

T. Which.

R. Bueno el sistema de vida aquí es una. Yo me he adaptado al sistema americano. You know the American system for example. I adapted to the American system in this country because I forget everything. The ideas in Puerto Rico but I take new ideas in this country and

I make everything here. For example in the kitchen in the food everything is different there. I don't use the Spanish food for example.

G. You mean at home?

R. In the home. My wife says you want to eat rice and beans. I say no, don't give me rice and beans because I don't like rice and beans see. That's make a change you know in the system from before.

G. Would you like to be more American than you are or you think you're American enough?

R. I like American system.

G. And would you like to know the system more than you do now?

R. Right.

G. How could you do this? How could you become more American?

M. ¿Como puede Ud. ser más americano de lo que es?

R. Bueno si uno puede ser mas americano de lo que es, es adaptándose más al sistema americano. (END OF SIDE ONE)

T. Well if you want to be more American than you are, the way to do it is by adapting more to the American system.

R. La música española porque no puedo ya a la edad mía adaptarme a la música de ahora me agrada más la de nosotro de ante que a la música americana.

T. The Spanish music because at my age I can't adapt myself to the music now. I like ours more than the American.

M. He says he adapts more to the Spanish music than the American music because of his age and it's hard for him to adapt to the music now so he likes the old Spanish music.

G. Do you know the words to some of the songs? You sometimes like to sing along with the music?

M. ¿Que si le gusta cantar algunas veces?

R. Sí cantaba ante cuando yo era joven.

T. Yes I sang when I was younger.

M. He says yes when he was younger he used to sing.

G. You sing with the Puerto Rican songs?

R. Yeah, the Puerto Rican.

G. Do you go to church at all?

R. Yes. Now I don't go because sometimes I'm busy.

G. About how often do you go?

R. I go different church. It no make any difference Catholic, Protestant, any.

M. ¿Como cuantas veces va Ud. a la iglesia?

R. Ante yo estaba iendo toda las semanas. Ahora no estoy iendo casi a ninguna porque estaba trabajando de noche y venía a la 4 de la mañana aquí.

T. Before I used to go every week but now I hardly go because I'm working late and get home at 4:00 in the morning.

M. He says that before he used to go every week but now since he works late at night, he comes home 4:00 in the morning and the next Sunday he can't go to Mass.

G. When you used to go to Church did you go in English or in Spanish?

R. Spanish.

G. You went to the Spanish?

R. Yeah, Spanish is better because we make better interpretation.

G. You understand it a little bit better?

R. Right.

G. (Pause) Do your children have padrino y madrina?

R. Yeah.

G. Do they have padrino de agua & bautismo?

R. Yeah.

G. Is it the same person or different?

R. No, different.

G. Who are the people? Are they relatives of yours or friends of yours?

R. No, friends.

G. Your compadres are all friends?

R. Right.

G. From Puerto Rico or?

R. No, here.

G. Here.

R. I have one in Puerto Rico.

G. But the others are all here, New York and Jersey City?

R. No, Jersey City and one in New York and another in Puerto Rico.

G. Do you see your compadre very often?

R. Yeah. I have one I see every 2 or 3 days. He live here on 12th Street.

G. And you visit at his house or he comes here?

R. Yeah. I saw him yesterday and we went to the parade.

G. Did you enjoy the parade?

R. Yeah.

G. Where do you shop for most of your food?

R. In the supermarket.

G. And you don't go to the bodega?

R. No. For a little you knowwhen we need something Spanish we go there but I buy everything in the Finast, Shop Rite.

G. Why do you go to the Shop Rite? Why do you go there?

R. No make any difference but I like when I go because we don't have too many time for buy and the little time we buy have to go to someplace and I find everything there.

G. The bodega doesn't have everything?

R. No. Because they have everything Spanish but we don't use too much Spanish.

G. I see. Do youthink that your children, when the children are growing up, when they're getting older that the girl should be watched more than the boy?

M. ¿Que si Ud. creé que cuando los hijos sean mas grande que Ud. tengan que velar mas a la muchacha que a los machos?

R. No yo creo que no.

T. No I don't think so.

M. ¿Ud creé que la muchacha se puede velar igual?

T. You think that the girl should be watched the same?

R. Yo creo que sí. Tanto tiene uno que cuidar a un varón que a una niña. Ese es lo mío. Hay distinta opiniones. Para mi yo los velo equal porque tantos pasos malo puede dar la hija como lo puede dar el hijo.

T. I think so. You have to watch the boy just as much as the girl. That's what I think. There are different opinions. I watch them the same because both the girl and the boy can become bad.

M. He says that he believes that both of them should be taken care of the same way.

G. And do you ever visit the espiritista?

R. Never. I don't like that.

G. Do you read the Spanish newspaper?

R. Yeah.

G. How often?

R. I read all the Spanish paper I can.

G. Everyday?

R. The Diario, El Tiempo, and the Imparcial.

G. Everyday you read the three?

R. When I have no time to buy I feel very sorry because I like because I want to take the information from all paper.

G. Do you also read the English paper?

R. No. I read a little. But I can't make a good interpretation, for that I read in Spanish.

G. Do you do any other reading at all or just the newspaper?

R. I read the Bible.

G. Do you read novelas or poems or any other kind of reading?

R. The Bible.

G. The Bible en español?

R. Yeah. I read novelas I like read everything. All my life.

G. And its novelas, and Bible and ...

R. Right.

G. And what else?

R. And the papers.

G. And the papers. If you had more time what kind of things would you read now?

R. I like to read history. A mi me gusta leer historia por ejemplo de Puerto Rico de U.S. y cosas asi pero me gusta leerla en español porque en inglés no puedo interpretarla.

T. I like to read history for example of Puerto Rico, of the U.S. but I like to read them in Spanish because I can't interpret them in English.

M. He says that he likes to read in general but he also loves to read history books. He likes to read on the history of Puerto Rico and the history of the U.S.

G. And you always read the history in Spanish?

R. Yeah.

M. He says he read it in Spanish because he interprets it better in Spanish.

G. I understand. Do you listen to the Spanish radio program?

R. Yeah.

G. How often do you do this?

R. All the hours I have time.

G. Everyday?

R. Everyday yeah.

G. And do you listen to the English radio also?

R. No.

G. You prefer the Spanish?

R. Spanish yeah.

G. Why is that?

R. The time I have for listen the radio I have to listen to something I can interpret. If I put the English it take too long for me to make interpretation.

G. If you had more time what would your favorite program be? What kind of program do you like to listen to?

R. Yo no tengo selección ninguna en los programas hispano mi me gustan todo. Lo pongo por la mañana y lo oigo hasta la 4 de la mañana que vengo.

T. I have no preferencein the Spanish programs. I like them all. I put it on in the morning and hear it until 4:00 in the morning when I come back home.

M. He says he has no selection of all the programs. He puts the radio on in the morning and he listens to 4:00 in the morning.

G. You like music and news and everything?

R. Music and information they give.

G. Do you watch the Spanish T.V.? The Spanish programs on T.V.?

R. Not today.

M. ¿Que si Ud. vé la televisión en español?

R. Oh si por la noche si.

T. Oh yes, at night, yes.

M. At night time.

G. Every night?

R. Every night.

G. And do you listen to English on T.V. also or just the Spanish?

R. Just Spanish.

G. Just Spanish.

M. ¿Ud. vé la televisión más que en español?

R. No en inglés me gustan mucho las películas que dan. Son más interesante que las hispana.

T. In English I like the movies because they're more interesting than the Spanish.

M. ¿Le gusta más lo americano que lo español?

T. You like American more than Spanish?

R. Si. Right.

T. Yes.

M. He says that he enjoys the American pictures more than the Puerto Rican pictures because he says they're more interesting.

G. The movies you mean?

R. Yes.

G. But the shows in Spanish.

M. ¿Pero los programas en español?

R. Si porque puedo entenderlo mejor.

T. Yes because I understand it better.

M. He says he sees them because he understands them better.

G. When you go out to relax for entertainment do you do Puerto Rican things or American things?

M. ¿Cuando Ud. sale afuera para divertirse que si Ud. hace cosa americana ó cosa puertorriqueña?

R. Bueno más la hago americana, porque por lo regular me voy al parque que es lo más que costumbran los americano. Me voy al parque a cojer fresco por que ya no tomo, o estar con la familia mía ó los muchachos jugar eso es lo único que yo hago.

T. Well more in American, because I go to the park and that's what the Americans mostly do. I go to the park for fresh air because now I don't drink, or stay with the family or see the children play. That's the only thing I do.

M. He says that he does more American because he goes to the park and this is one of the customs of the American people have and he spends all day in the park because before he used to drink and now he doesn't drink and he watches the children play or stays home.

G. You take your children to the park?

R. Yeah, sometimes we go to West Side park. Sometimes we go to New York.

G. But you don't go to the clubs for dancing or...

R. No, because I don't know any club.

G. You don't drink now and you don't go to the bar to drink?

R. No, never.

G. What do you think of American children?

R. Well my opinion I no make any difference. I think we don't have any different with the American for me the American, the white, the black and all other children is the same. For that I have in my opinion for the Puerto Rican boys.

G. Do you think that a Puerto Rican parent tries to make his children be different from the American child or does he teach him to be the same.

M. ¿Que si Ud. creé que los padres Puertorriqueños tratan de criar sus hijos diferente a los americanos?

R. No. Mi opinión es que son todo igual.

T. No, in my opinion they're all the same.

M. He says in his opinion they're all the same.

G. What do you think of America as a whole? What do you like about the American people or what don't you like about American people?

R. How I like American people?

G. Si.

T. Yes.

R. I like American people the same I like my brother.

M. ¿El quiere decir que le gusta a Ud ó que no le gusta la gente. Americana?

R. Bueno yo creo que las costumbres americana me gustan. Las costumbres americana nos ha enseñado adaptarmos al systema que es un poco mejor que el de nuestro paés. Me agrada las costumbres de ello.

T. Well I think I like the American customs. They have showed us how to adapt to the American system which is a little better than ours. I like their customs.

M. He says that the American system has helped us a lot to adapt to the American culture.

G. You think that American people are helpful? This is what you like?

R. Yeah.

G. Is there anything that you don't like about American people?

M. ¿Que si hay cualquier cosa que no le guste de la gente americana?

R. Si hay algo no puedo recordarla.

T. If there's anything I can't remember it.

M. He says if there's anything he doesn't remember it.

G. And now can you tell me what you like about the Puerto Rican people?

M. ¿Que le gusta de los puertorriqueños?

R. Bueno lo más que me gusta de los puertorriqueños es que el puertorriqueño es una persona muy humanitaria que no vemos diferencia para nosotros poder ayudar a alguien es muy importante. Es satisfacción para nosotro poder ayudar a alguien que no pueda. Eso es una costumbre muy buena de las puertorriqueñas y los puertorriqueños pues tenemos muchas costumbres buena. Nosotros nos ayudamos en este país.

T. Well, what I like most of the Puerto Ricans is that the Puerto Rican is a very humane person who doesn't see any difference. For us to help somebody is very important. It's satisfaction for us to be able to help people who can't help themselves. That's a good custom of the Puerto Ricans and we Puerto Ricans have many good customs. We help each other in this country.

M. He says what he likes about the Puerto Rican is that they're very hospitable and that they always help people. They're very helpful people.

G. Is there anything you don't like about Puerto Rican people?

M. ¿Hay cualquier cosa que lo de gusta?

R. No me gustan las personas que quieren sé más superior que otras pero como son un numero muy limitado pues uno no le da atención a eso. Son cosa que no me gustan de los puertorriqueños que se reunen en los holes de las casas ó en los sitios en grupito de

4 o 5. Son costumbres que yo como puertorriqueño las critico para mí. Son costumbre que no gustan. El hablar alto cuando van en la guaguas y en los subways pues cualquiera que va conoce que son puertorriqueño porque el sistema de hablar.

T. I don't like the people who want to be superior to others but it's such a small number that we don't pay them any attention. I don't like when the Puerto Rican meet in the halls of the houses or in other places with groups of 4 or 5. These are customs that I as a Puerto Rican critize. I don't like when they talk loud when they're in the bus or the subways. Everybody knows you are Puerto Rican by the way you have of talking.

M. He says he doesn't like first of all the ones that make themselves superior to others and also he doesn't like the ones, that hang around in the hallways and make noise. He says that they could tell they're Puerto Rican because they show it the way they speak in the subways. They're very rowdy and loud.

G. (Pause) Do you think that America is the land of opportunity? The country of opportunity?

M. ¿Que si Ud. crée que América es el sitio de oportunidad?

R. Yo creo que para mí, mi opinion es que lo es. Yo creo que es el sitio que mejor oportunidades tenemos, no nosotros los puertorriqueño, si no todos lo que vienen a este país.

T. I think that, in my opinion, I think that we have better opportunities here, not only the Puerto Rican but everybody that comes here.

M. He says yes, that he thinks it's the land of opportunity but not only for the Puerto Rican but for everybody that comes here.

G. ¿Y porque?

T. And why?

R. Bueno...

M. Before he said there were a lot of opportunities.

G. What kind of opportunities.

R. All the kind of opportunity. Some people come here the first, la primera oportunidades que tenemos cuando venimos a este pais, los puertorriqueños, los cubanos, dominaco, los franceses, españoles cualquiera que muy a a este país es cojer costumbres, que nos adaptamos, y tenemos que aprender las costumbres de aquí, costumbres que a veces en nuestros países son otra cosas. Segundo es que aquí los estudiantes los niños que a veces en otros sitios no pueden estudiar aquí vienen y estudian. Aunque en Puerto Rico también se estudia pero hay otros países que no tienen la oportunidad de estudiar. El que viene a trabajar encuentra adonde ganar dinero los hombres, la mujer, todo el mundo. Aquí hay oportunidades para todo.

T. The first opportunities we have when we come here, the Puerto Rican, Cubans, Dominicans, the French, Spaniards whoever comes here to this country is that we have to learn the customs of this country. Customs which in other countries may be different. Secondly the students that in other places don't have the opportunity to learn they have this opportunity here to study and learn. Even though in Puerto Rico you also study but here it's better. Also the one who comes to work finds a job where he can earn money. The men and women and everybody alike find jobs. Here here are opportunities for all.

M. He says, first of all the biggest opportunity that they have is coming to the U.S. and learning their customs and adapting to their system of life and secondly the educational system is very good. Even though in Puerto Rico they have an education but he feels that the education here is much better and also he says there's better opportunities for getting jobs.

G. Have you heard much about Puerto Rico, is it developing? Have you heard that the country is becoming developed now?

M. ¿Que si Ud. ha oído que Puerto Rico se esta industrializando más ahora?

R. Yo lo creo que si. Si.

T. I think so. Yes.

G. What have you heard about this?

M. ¿Que ha oído Ud. de esto?

R. Bueno yo no he oído si no yo lo he podido interpretar a mi manera. Yo creo que Puerto Rico ha querido más conocimiento y mas experiencia después que estamos realacionandonos en este país porque nos hemos, adaptamos al sistema de aquí pues cuando vamos a nuestro país ya tenemos mejores costumbres. Nosotros siempre decimos que este país para nosotros es una escuela porque aquí es donde se viene a aprender. Por ejemplo trabajo que nosotros en Puerto Rico no lo hacíamos, viene a este país y tienen que hacerlo.

T. Well I haven't heard of any but I'm going to interpret it my way. I think that Puerto Rico with the help of the U.S. is industrializing. I think that the U.S. serves as a school to me because when I go back to my country I will know better the customs and be more educated. This is a school because it's a place where you come to learn. Like for example jobs that you couldn't do in Puerto Rico you come here and do them.

M. He says that in his opinion the relation the Puerto Rican has with the U.S. has helped him a great deal in the fact that he uses a phrase he says that to him the U.S. is a school and that it'll always be a school where the Puerto Rican comes there and goes back to his country and tries to better himself there even though they do come here to educate themselves. They do go back and that the people have learned and have industrialized themselves with the help of the U.S.

G. What do you think most American people think about the Puerto Rican? What is the attitude of most Americans toward the Puerto Rican?

M. ¿Que Ud. crée que los americano piensan de los puertorriqueños?

R. Bueno hay un número limitado que piensan mal del puertorriqueño pero sin embargo hay otros que han ido a Puerto Rico que han tenido conversación, y relaciones con puertorriqueño y han sabido del puertorriqueño.

T. Well, there's a limited number that think bad of the Puerto Rican but on the other hand there are others that have gone to Puerto Rico and have had conversations, and relations with the Puerto Rican and know about the Puerto Rican.

M. He says that there are some that do have something against the Puerto Rican but there are also the ones that go to Puerto Rico and know what Puerto Rico is like, that knows how to get along with the Puerto Rican.

G. The ones that have something against the Puerto Rican, what is it? What do they think of the Puerto Rican?

M. ¿El dice que eso que tienen algo contra el puertorriqueño que, que Ud. crée que es que tienen contra ellos?

R. Es un simple, es una pequeña sufrida de muchos años atras. Que cuando los puertorriqueños empezaron a venir fueron atropellados por muchos ciudadanos de acá. Entonce vino cierto odio contra el puertorriqueño porque el puertorriqueño en aquellos tiempo trato (unintelligible) y coltaban, peleaban, y derramában sangre para conseguir porque aquí el puertorriqueño paso mucho trabajo. Entonce esta gente de aquí pues tuvieron este concepto del puertorriqueño y todavía lo guardan.

T. It's a grudge they have from way back when the Puerto Rican first started coming here. They were attacked by many people from here. Then there was hate against the Puerto Rican because the Puerto Rican at that time tried (unintelligible) and cut, and fought and spilt bloodshed. To find what he wanted the Puerto Rican had a lot of trouble. Then the people from here had this concept of the Puerto Rican and they still have it.

M. He says that the Americans have a grudge against the Puerto Rican because along time ago when the Puerto Rican first came here they had fights, there was bloodshed, riots and all this to prove like you know every other ethnic group did and that the Americans still hold a grudge towards the Puerto Rican.

G. Have you ever noticed any discrimination against the Puerto Rican?

M. ¿Que si Ud. ha notado algun prejuicio contra el puertorriqueño?

R. No. Yo hasta hora no lo he notado. Excepción de ante muchos años atrá por ejemplo yo, ibamos a cierto sitios buscando apartamento y no lo querían alquilar a puertorriqueño.

T. No, I haven't noticed any up to now. But years ago for example if we went to look for an apartment they didn't want us because we were Puerto Rican.

M. He says with the exception of long ago he would go to a place to look for an apartment and they wouldn't want him because he was Puerto Rican, but now it's all right he says.

G. Now there's no problem?

R. No.

G. What do you think the Puerto Rican people think of the American people?

M. ¿Que Ud. crée que los puertorriqueños creán de los americanos?

R. Bueno eso es la mismo contestación de la frase de horita. Hay puertorriqueños que tienen cosas contra los americano pero ws un numero muy limitado que no se le puede dar importancia. Porque no no creo que un puertorriqueño puede tener uno concepto malo de los americanos cuando este país le abre le puerta a todo el mundo. Aquí no tienen discriminación para nadien. Todos encontramos refugio en este país.

T. Well, that's the same answer as to the other question before. There are Puerto Ricans that have things against the Americans but that's a limited number which is of no importance. Because I don't think that a Puerto Rican can have a bad concept of Americans when this country has no discrimination for anybody. We all find refuge in this country.

M. He says that the number of the Puerto Ricans that do have something against the American is so small that they are of no importance because he feels that the Puerto Rican should have a grudge against the Americans because of the fact that he says that this land has its doors open to everybody that they can't possibly have anything against the American people.

G. (Pause) Where do you feel more comfortable or more at home, with American people or Puerto Rican people?

M. ¿Como se siente Ud. mejor, con un grupo de americano o con un grupo de puertorriqueño?

R. Esa es una pregunta muy fácil para contestar. En cuanto a la familiaridad me encuentro más contento entre un grupo de nosotro. Ahora en cuanto a la tranquildad estoy con el grupo de acá.

T. That's an easy question to answer. For familiarity I find myself happier, between a group of our own kind. Now for quiet I like the American better.

M. He says with the family he feels more at home. With the Puerto Ricans because they're his family, but as far as being with the Americans, when it comes to being quiet he likes to be better with the Americans.

G. If you had no problem with money would you prefer to live in Puerto Rico or would you prefer to live here?

R. This time after know this country (unintelligible). Tu sabe lo que yo quiero decir que después de haber vivido tanto en este país y haberme adaptado al sistema y costumbre de aquí me gustaría estar en mi país para el final de le vida.

T. You know what I want to say that after having lived here so many years and having adapted to this system and the customs here I would like to be in my country for the end of my life.

M. ¿Si pero él también quiere saber si Ud. tuviera el dinero suficiente adonde a Ud. le gustaría vivir aquí o allá?

R. Allá.

G. What do you like about living in Puerto Rico?

M. ¿Qué le gusta de Puerto Rico?

R. Todo. El clima, las costumbre, el como se cuidan los niños.

T. Everything. The climate, the customs, and how the children are taken care of.

M. He says he likes the climate and the customs of taking care of the children.

G. Before you told me you prefer American food, you don't like the rice and beans?

R. You know why because I don't like the food with too much (unintelligible). I like the food easy and the American food is very good for everybody all the stomachs. I have a good appetite for the American food.

G. What kind of food do your children prefer?

R. American too.

G. They don't like Puerto Rican food?

R. They don't need rice and beans. It's no good for them.

G. And you prefer this? This is what you want?

R. Right.

G. When your children speak with you do they speak mostly in Spanish?

R. Yeah, more in Spanish.

G. And do you want this? Is this what you prefer?

R. Sometimes they speak me in English and I answer to them.

G. But mostly of the time...?

R. In Spanish.

G. In Spanish. You want it this way? This is what you want?

R. That's right. I like because I want to learn too. And they can teach me.

M. ¿El quiere decir que si Ud. quiere que ello le sigan hablando Ud. en español?

T. If you want them to continue speaking Spanish to you?

R. Oh no. A mí me gustan que ello hablan inglés porque lo practican ello y me instruyen a mi también. Yo a veces cuando salgo con ello le digo don't speak Spanish in the street. Don't speak Spanish, speak English.

T. I like them to speak English because they practice it and they teach me also. When I go out with them I tell them not to speak Spanish in the street.

G. But in the house you want Spanish?

R. No.

M. He say that they speak to him in English, he likes them to speak to him in English because it's practice for him and practice for them.

G. Yes.

M. ¿Pues de verdad a Ud. no le importa si hablan en español ó en inglés?

T. Well you really don't care if they speak Spanish or English?

R. No para mi es igual. Para mi si hablan en inglés es mejor.

T. No for me it's the same. For me if they speak English it's better.

M. He says to him it's the same but if they speak in English it's better.

R. It's better.

G. Okay. And when the children speak with each other what do they speak?

M. ¿Cuando hablan los niños entre ellos que hablan?

R. En inglés.

T. In English.

G. They speak in English?

R. Yeah, speak in English.

G. And this is what you want?

R. Oh sure I like that.

G. (Pause) Do the children read in Spanish or in English now?

R. They don't read too much. But read in English. What ever the read and write, in English. The boy and two girls. They they don't write because they not in the school yet.

G. Do you want your children to read in Spanish?

R. I like but I like better the English for them.

G. You think it's more important for them to read in English?

R. Yeah, is more important for them.

G. Is there any way you can help them to read in Spanish?

M. ¿Que si hay alguna manera que Ud. pueda ayudarlo para que lean en español?

R. Si. Yo muchas veces le hago una nota para la tienda y yo le enseño y le digo. Y cuando ello dicen una palabra le digo no, esto se escribe así o se leé así.

T. Yes. Many times I writea note for the store and I teach them and tell them and when they say a word wrong I say no and I write it and tell them it's this way.

M. He says that he teaches them you know when they go to the store he gives them a little note and teaches them the words and writes the words.

G. Are they learning now to write in Spanish and to read in Spanish?

M. ¿Ud. les está enseñando a leer & escribir en español?

R. Si, si ello yo lo enseño. Ante de ir a la escuela se le enseña el español.

T. Yes, I'm teaching them. Before they go to school I teach them in Spanish.

M. He say that he's teaching them before they go to school in Spanish.

G. Are most of your children's friends Puerto Rican or American?

M. ¿Que si la majoría de los amigos...

R. No is mix because they have the friends in the street, and they have the color boys, American, any kind.

G. It's half do you think?

R. But they in the street they speak English.

G. But the friends is half American and half Spanish?

R. Right.

G. Is this what you prefer?

R. Oh yeah, sure. I like, que me agrada que este relacionados uno con otro, no importa la raza, quien sea.

T. I like them to be integrated one with the other, it doesn't matter the race, anybody.

M. He says like them to be integrated.

G. Do your children feel more comfortable with the American children or with the Puerto Rican children or do they feel comfortable with everybody?

M. ¿Que si sus hijos se acostumbran más con los americanos, ó con los puertorriqueños o si se acostumbran con todito?

R. No con todo iguale. Everybody together.

T. No, with all the same.

G. Everybody. Do you want your children to grow up entirely as Americans?

M. ¿Que si Ud. quiere que sus hijos se crien como americanos?

R. Right. A mi me agrada que se crien junto.

T. I like them to be brought up together.

M. ¿Como americano solamente?

T. Like Americans only?

R. No, porque no me gustaría que se olvidaren de las costumbres nuestra, por ejemplo del idioma a mi me interesa que lo aprendan, pero también el inglés, pero no me gustaría que se le olvidara el español y las costumbres de nosotros.

T. No, because I don't want them to forget our customs, for example, the language. I'm interested that they learn the Spanish but the English also, but I wouldn't like them to forget the Spanish and the customs of our country.

M. He says he'd like them to grow up as Americans but not to forget their culture, their Puerto Rican background.

G. Is there a danger living here that they may become more and more American and less and less Puerto Rican?

M. ¿Que si hay un peligio aquí de que su hijo se pongan mas y mas americano y menos y menos puertorriqueño?

R. Bueno sí, en cuanto a eso sí, en la medida que van creciendo pues se van adaptando al sistema de aquí ese es una cosa que a mí no me gustaria que se olvidaran de lo nuestro porque ello niños estan aquí con nosotros pero mañana yo falto ó la madre y no sabemos si ellos vuelven para nuestro país o se quedan aquí pues tienen que adaptarse al sistema de allá. Si se le olvida de allá pues pasan trabajo. El mismo trabajo que pasamos nosotros cuando venimos a este país.

T. Well while they're growing up they adapt to the system here that's one of the things. But I wouldn't like them to forget because if I should die or their mother should die and they have to go back to our country well they have to adapt to the system there. Well if they forget the customs of over there well they'll have trouble. The same trouble that we had when we came to this country.

M. He says that there is a danger of them becoming more and more American here because if one of them should die and they should go back to Puerto Rico let's suppose they become so adapted to the American culture that it's very difficult for them to change when they go to Puerto Rico.

G. This will be a problem for your children you think?

R. Yeah.

G. Do you think that they can be both American and Puerto Rican as the years go on?

M. ¿Qué si Ud. crée que pueden ser americano & puertorriqueño junto según van los años?

R. Bueno sí. Pueden ser las dos cosas.

T. Well yes. They can be both things.

M. He says yes, they could be both at the same time.

G. What can you do to make sure that they don't forget to be Puerto Rican?

R. Well, the father can teach...tu sabe los padres pueden influenciar mucho los hijos ya que aquí por las costumbres no se tienen que preocupar porque eso se lo enseñan en la escuela pero si los padres queremos darle instrucción a los hijos por ejemplo en el idioma y las costumbres de nuestro país y enseñarlo a comer las comidas de nuestro país y todas esas cosa. Por ejemplo yo a los niños de aquí ello no le gusta la comida hispana pero a veces yo se la hago comer porque yo no se si algun día tienen que volver a nuestro país y allí tienenque comerse toda las cosas.

T. You know the fathers can influence the children. Now that the customs here they won't forget because they learn them in school but if the parents want to give them instruction for example in the language and customs of Puerto Rico and teaching them how to eat the Spanish food they can. For example to my kids they don't like the Spanish food but sometimes I make them eat it because if someday they have to go back to Puerto Rico there they'll have to eat all these foods.

M. He says that he feels that he could educate his children to not to forget their Spanish and that he would teach them the customs so that they won't forget them and he says that they don't like the Puerto Rican food but he says he gives it to them and he makes them eat it so that if they go out to Puerto Rico they would adapt to the Puerto Rican culture if something should happen to them.

G. Do you think that your children will be less Puerto Rican than you?

M. ¿Que si Ud. crée que su hijo va ser menos puertorriqueño que Ud.?

R. Bueno yo creo que sí porque si se adaptan, si se crian aquí pue ello no pueden compenetrarse de lo que es de nuestro país de las costumbres de allá. Ello tienen que ser más americano que puertorriqueño. Yo por ejemplo me crié & nací en mi país y sé lo que es aquello. Pero ello no saben lo que es.

T. Well I think yes because if they adapt if they are brought up here. They can't learn the customs of our country. They have to be more American than Puerto Rican. I for example was born there and brought up there and I know the customs. But they don't know them.

M. He says that he thinks that they will be less Puerto Rican than him because they were born here first of all and they have adapted to the system here, and they've been brought up as Americans really. But he was brought up in Puerto Rico, he knows what it's like to be Puerto Rican, he knows the life and the customs there and they don't.

(NOTE - side 2 ended here)

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Resp. 023

General Conversation

M. No es de Can Do, es de Yeshiva University.

T. It's not of Can Do, its from Yeshiva University.

R. Oh eso es muy bueno.

T. Oh that's very good.

M. I told him what the program's about.

G. Okay well you can come and see us any time. We'll be here for about another 5 weeks cause I'm trying to speak with all the families.

R. Okay. Anytime I can give my help let me know and I'll be ready any time.

G. Thank you.

(Pause)

M. Mi español no es muy bueno pero trato de hablarlo.

T. My Spanish is not too good but I try to speak it.

R. Pero hablas bueno como no.

T. But you speak good.

M. Yo voy a ser una maestra de español.

T. I'm going to be a Spanish teacher.

R. Pues si tu hablas bueno, bueno el español.

T. Well, yes you speak Spanish well.

M. Porque hay muchas cosas que Ud. dice no las entiendo.

T. Because there are many things that you say that I don't understand.

R. Pero sin embargo está perfecto, esta bien a pesar de todo estas bien relacionado porque coje el inglés rápido y el español también.

T. But on the other hand it's perfect, it's good, because you understand the English and the Spanish also.

M. Yo fuí a Puerto Rico. Hace una semana que vine.

T. I went to Puerto Rico. It's been a week that I came back.

R. ¿Como te gusto Puerto Rico?

M. Yo nunca había ido porque yo nací allá pero vine cuando tenía 3 años y hacen 14 años que no iba.

T. I had never gone because I was born there but I came here when I was 3 years old. It had been 14 years since I had gone.

R. ¿Como te gustó?

T. How did you like it?

M. Para mi la isla es preciosa pero para quedarme no.

R. De los que vienen pequeñito ó los que nacen aquí pue no le importa aquello porque no se han adaptado.

T. Of the ones that come here small or the ones born here don't care about Puerto Rico. They haven't adapted to it.

M. Para mi para visitar siempre pero para quedarme no.

T. For me to visit always, but to stay no.

R. Porque no se han podido adaptar, no han tenido la oportunidad de adaptarse aquello. Está para ir precioso y perfecto.

T. Because you haven't adapted to it, you haven't had the opportunity. To go it's beautiful and perfect.

M. Y caro.

T. And expensive.

R. Allá esta más cara la vida que aquí.

T. Live over there is more expensive than here.

M. Sí.

T. Yes.

R. Yo hace 2 años que estuve allá.

T. It's been 2 years since I was there.

M. Si yo hace una semana que vine.

T. It's been a week that I came.

R. Sí, aquello está precioso. Pero caro.

T. Yes, there it's beautiful but expensive.

M. Para los turista.

T. For the tourist.

R. Hay que llevar dinero para pasarse alla 15 o 20 días.

T. You have to take money to stay there 15 or 20 days.

(Pause)

G. Did you learn to speak English in the hotel or in school?

R. No, in the hotels.

G. In the hotels? But in the school no?

R. Yeah, in the school before when I go to school to 3rd grade, they learn few words and I learn, but after work in the hotels, aprendí un poco cuando yo fuí a trabajar a los hoteles. Trabaje en un hotel americano y los chefs no sabían hablar español pue teniamos que embotellarnos los menus en inglés por eso es que yo escribo bastante. Yo escribo palabras así bastante.

T. I learned a little when I went to work in the hotels. I worked in an American restaurant and the chefs couldn't speak Spanish so we had to memorize the menus in English; that's why I can write good. I write many words like that.

M. He says he worked in an American hotel, he learned his English. He says he had to because it was an American restaurant. He says he writes English very well because of the menus he wrote.

G. Okay, we have to go now. Thank you for the juice and for the conversation.

R. All right.

Chapter
III-3-a

SITUATIONAL MEASURES OF LANGUAGE USE IN RELATION TO PERSON, PLACE AND TOPIC AMONG PUERTO RICAN BILINGUALS[1]

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In recent years, several studies have reported on the relationship between verbal behavior and a variety of psychological and social factors, such as the setting, the roles of the participants, the topics of conversation, the functions of interaction, and the views of interlocutors concerning each of the foregoing (Ervin-Tripp, 1964). Labov (1964), for example, found a series of phonological alternates in New York English speech which covaried with elicitation methods (that implied varying situational contexts of verbal interaction) and the socioeconomic status of the speaker. Fischer (1958) who studied the alternation between the use of the suffixes 'in' and 'ing' by New England children found that 'in' was used to a greater degree than 'ing' by boys than by girls, by children of lower than of higher socioeconomic backgrounds, in informal than in formal portions of the interview, and with informal verbs, such as 'chewin' and 'hittin' than with formal ones, such as 'correcting' and 'reading'. Brown and Gilman (1960) found that the use of the pronouns 'tu' or 'vous' (and their corresponding verb forms) in several Romance languages depended on relationships of power and solidarity existing between interlocutors.

The social and psychological factors that are signaled linguistically by stylistic variation within a language are frequently expressed by a complete switch in code in some bilingual settings (Ervin-Tripp, 1964; Hymes, 1966; Gumperz, 1964a). Rubin (1962) found that factors such as intimacy and informality were useful in describing the use of Spanish and Guarani in Paraguay. Thus, for example, young men used Spanish when first starting to court their sweethearts but as intimacy developed shifted to Guarani. Gumperz (1964b) and Blom and Gumperz (1966) found that the use of the local dialect and national standard in a small Norwegian community was predictable from the social background of the interlocutors, the types of networks they formed and the topics discussed.

Fishman has proposed the concept of domain in order to specify the larger institutional role-contexts within which habitual language use occurs in multilingual settings (Fishman, 1964, 1965a, 1965b, 1966). In gathering data appropriate to a given domain the investigator abstracts from or samples social situations at the level of face-to-face interaction involving domain appropriate places, role-relationships and topics. For example, in studying habitual language use in the family domain the investigator collects data regarding interactions between such domain appropriate interlocutors as husband - wife, parent - child, grandparent - grandchild, in such domain appropriate locales as "home", concerning such domain appropriate topics as "proper behavior of children". Relevant domains for describing language use in many relatively complex multilingual societies would probably include family, friendship, religion, education, work sphere, and government (Fishman, 1966).

Using this concept, Fishman has distinguished between stable bilingual societies in which diglossia obtains (Ferguson, 1959), and unstable bilingual societies. In the former languages are reserved for different domains of life in the community. In the latter domain separation in language use vanishes and the 'other' tongue becomes used alternatively with the 'mother' tongue, particularly in the family and friendship domains. In general, unstable intragroup bilingualism has occurred in cases of immigrant languages in the context of rapid industrialization, urbanization, or other rapid social change, as for example, in the cases of Yiddish, Ukrainian, Hungarian and German in the United States (Fishman, 1965a). Examples of more stable intragroup bilingual speech communities have been described by Barker, 1948; Blom and Gumperz, 1966; Ferguson, 1959; Fishman, 1965b; Rubin, 1962; and Weinreich, 1951.

Recently Fishman (1966) has developed a sociolinguistic model which suggests that in diglossia situations there generally exist two major clusters of complementary community values, called L and H, respectively, each of which is realized in a different speech variety or language. L-related values are usually those of intimacy, solidarity, spontaneity and informality, while H-related values usually involve an emphasis on status differences, ritual and formality. Furthermore, those members of the community who identify with or accept these two cultural value clusters tend to utilize the culturally approved speech variety or language in their domain appropriate behavior. Typically, the L-variety or language is used in domains such as family and friendship, while the H-variety is reserved for domains such as education, occupation and religion. Moreover, when two individuals interact in a locale or disucss a topic that is incongruent with their usual role-relationship, they tend to use the speech variety or language which is congruent with their re-definitions of the situation.

For example, a professor and student who are engaged in mountain-climbing may no longer view themselves as professor-student but as individuals interacting in some other role-relationship. Under such circumstances, the variety used would be appropriate to the perceived social relationship and to the re-defined total situation of which that relationship is a part.

Several studies have suggested the possibility that unlike most previous immigrant groups in the United States, the Puerto Rican community in New York has many of the features that Fishman describes in his model of diglossic speech community. One factor that has been mentioned in favor of this possibility is that while adapting to life in the United States, the Puerto Ricans in New York continue to maintain close physical ties with their homeland and as a result, come to identify with the values prevalent in both countries (Padilla, 1958; Senior, 1965; Hoffman, 1968). According to these studies, Puerto Ricans learn from the U.S. the importance of social and economic advancement and from their Puerto Rican heritage the importance of maintaining close contact with family members and friends. Therefore, it is hypothesized that in the Puerto Rican community in New York Spanish is associated with values such as intimacy and solidarity and is used in domains such as family and friendship while English is associated with values such as status differentiation and is used in domains such as religion, education and employment.

The present paper reports on two experiments which were designed to examine this possibility by means of two different specially designed instruments.

EXPERIMENT 1

Method

Technique

The technique used in the first experiment was derived from studies of the structure of conversations which were conducted by Hershkowitz and Krause (1965) and by Blass (1965). In these studies, lists of persons, places and topics were ranked by groups of American college students along the dimensions of intimate-distant, private-public and personal-impersonal, respectively. The students were asked to imagine themselves in a number of conversations of which two components were supplied by E and the third was to be filled in by them. When E supplied a pair of elements which were of the identical scale position (congruent), the Ss invariably selected the third one from the same end of the scale as the others. When the two provided elements were from opposite ends of the scale (thus being incongruent), there was a tendency for S to re-define one of them so as to be congruent with the other and then to select as the completing element one which was congruent with the perceived position of the first two. For example, when presented with the situation of talking to a friend (intimacy-distance rank #1 or #2) in the park (private-public rank #6 or #7), some of the Ss explained the situation by saying that "he wasn't really a good friend," while others explained it by saying that "no one was around." In selecting the third element, the former Ss tended to choose relatively impersonal topics, while the latter ones tended to select personal ones.

Subjects

The Ss included in this study were a group of boys and girls of

Puerto Rican descent who belonged to a Puerto Rican youth organization, Aspira, which sponsors clubs in New York City high schools. This organization is a private educational agency designed on the one hand, to build career opportunities and leadership roles for Puerto Rican youth and on the other, to develop in them a positive self-image by strengthening their Puerto Rican identification. Accordingly, this group was used as a basis for securing subjects who were most likely to identify with the two major value clusters in the community.

Procedure

Since domains are a higher order generalization derived from congruent situations (i.e., from situations in which individuals interacting in appropriate role-relationships with each other, and in the apporpriate locales for these role-relationships, discuss topics appropriate to these role-relationships and locales), it was first necessary to test intuitive and rather clinical estimates of the congruencies that were felt to obtain in the Puerto Rican community of New York City. After more than a year of participant observation and other data-gathering experiences it seemed to the authors that five domains could be generalizad from the innumerable situations that they had encountered, namely, "family", "friendship", "religion", "education", and "employment". As a means of collecting self-report data on language preference, a situation was selected which seemed to be typical of each domain. As indicated below each of these situations consisted of a seemingly congruent situational interlocutor, situational place and situational topic.

Domain	Interlocutor	Place	Topic
Family	Parent	Home	How to be a good son or daughter
Friendship	Friend	Beach	How to play a game
Religion	Priest	Church	How to be a good Christian
Education	Teacher	School	How to solve a math problem
Employment	Employer	Workplace	How to do your job in the most efficient way

An instrument was constructed which required S to imagine a number of situations in which two of the three components were provided by E. Specifically, S was requested a) to select a third component in order to complete the situation and b) to indicate the amount of Spanish and English they would be likely to use if they were involved in such a situation and if they and their Puerto Rican interlocutors knew Spanish and English equally well. For each situation, amount of each language used was to be rated on a five-point scale in which 1 = all in Spanish and 5 = all in English. In some of the situations the components which were provided by E were seemingly congruent as they appeared to belong to the same domains and in others they were seemingly incongruent as one of them appeared to belong to either the family or friendship domains (intimacy value cluster) and the other to the domains of religion, education, or employment (the status value cluster).

In accord with our hypothesis concerning the domains which existed in the community and the persons, places and topics that were congruent with these domains, it was expected that where the two components provided by E were congruent with each other the component selected by S would come from the same domain as both of those which were provided by E. Where the two components provided by E were incongruent with each other it was expected that the component selected by E would come from the same domain as one of the two provided components. Furthermore, in accord with the hypothesis that the community studied was a diglossic speech community, it was expected that a preference for Spanish would be reported when the third component chosen by S was appropriate to either the family or friendship domains; conversely, it was expected that a preference for English would be indicated when the component selected by E was appropriate to the domains of religion, education or employment.

The data gathering instrument was entirely in English and consisted of three sections in each of which the situations described constantly lacked a given component, namely, either the person, place or topic. The sections were randomly distributed among the Ss who were tested in groups at the conclusion of their club meetings.

Results

Choice of the third component. Table 1 shows the percent of Ss who for each of five seemingly congruent situations, selected the hypothesized domain-appropriate third component as the completing element. In the situation comprising "friend" and the friendship topic, the hypothesized friendship locale, beach, was chosen by only 40% of the Ss. In each of the remaining seemingly congruent situations, however, the component which was hypothesized to be congruent with those provided by E was selected by at least 80% of the Ss.

Table 2 shows for each of the seemingly incongruent situations the number of Ss who chose a component which was hypothesized to be congruent with one of the two provided components and the number who chose one which was hypothesized to be congruent with neither of them. For each situation of the situation-types studied, at least 85% of the Ss chose an element which was congruent with one or another of

Table 1

PERCENT OF Ss SELECTING 3rd COMPONENTS CONGRUENT WITH TWO OTHERS PRESENTED BY E AND DERIVED FROM GIVEN DOMAINS

	Congruent Component Selected		
Domain	Person (n=16)	Place (n=16)	Topic (n=18)
Family	81	100	89
Friendship	94	40	100
Religion	81	100	83
Education	81	93	100
Employment	88	100	100

Table 2

NO. OF Ss WHO FOR VARIOUS INCONGRUENT SITUATIONS PRESENTED BY E SELECTED A THIRD COMPONENT THAT WAS CONGRUENT WITH ONE OF THE TWO PROVIDED BY E OR WITH NEITHER OR THEM*

Components Provided		Selected Person Congruent with			Components Provided		Selected Place Congruent with			Components Provided		Selected Topic Congruent with		
Place	Topic	Place	Topic	Neither	Person	Topic	Person	Topic	Neither	Person	Place	Person	Place	Neither
Fam	Relig	12	1	3	Fam	Relig	14	1	0	Fam	Relig	7	9	0
Fam	Educ	14	0	2	Fam	Educ	14	0	0	Fam	Educ	15	2	1
Fam	Employ	13	2	1	Fam	Employ	15	0	0	Fam	Employ	3	14	1
Fr	Relig	14	1	1	Fr	Relig	0	4	11	Fr	Relig	1	13	2
Fr	Educ	16	0	0	Fr	Educ	0	8	6	Fr	Educ	6	10	1
Fr	Employ	12	1	2	Fr	Employ	1	7	7	Fr	Employ	1	16	1
Relig	Fam	13	1	2	Relig	Fam	14	0	1	Relig	Fam	3	15	0
Relig	Fr	4	7	4	Relig	Fr	9	4	1	Relig	Fr	11	5	2
Educ	Fam	0	13	3	Educ	Fam	14	1	0	Educ	Fam	9	5	4
Educ	Fr	1	13	1	Educ	Fr	15	0	0	Educ	Fr	9	5	4
Employ	Fam	6	0	10	Employ	Fam	13	2	0	Employ	Fam	13	4	1
Employ	Fr	3	13	0	Employ	Fr	10	4	1	Employ	Fr	9	9	0
Total		108	52	29	Total		119	31	27	Total		87	107	17
%		57	28	15	%		67	18	15	%		41	50	8

*Missing cases due to no response.

those provided by E. Of the situations in which S was provided a seemingly incongruent Place and Topic, the Person selected was congruent with Place in 57%, with Topic in 28%, and with neither Place or Topic in 15%. Of those situations in which a seemingly incongruent Person and Topic were provided, the Place selected was congruent with Person in 67%, with Topic in 18%, and with neither of the two provided components in 15%. In those situations in which an incongruent Person and Place were provided, the Topic selected was congruent with Person 41%, with Place in 50%, and with neither component in only 8%. All in all, the choice of third component was made congruent with Topic less often than with either Person or Place. Also noteworthy, is the fact that for most of the incongruent (as well as congruent) situations little variation was found in the selection of the third component, regardless of whether it was a Person, Place or Topic.

Language choice. Table 3 shows the mean amount of Spanish and English that Ss reported they would be likely to use in various hypothetically congruent and incongruent situations following their selections of another congruent or any third component, respectively. In hypothetically congruent situations, Spanish was decreasingly reported for family, friendship, religion, employment and education, regardless of whether the component selected was a person, place or topic. Similar results were found for hypothetically incongruent situations with only three exceptions (Ss reported they would use a smaller amount of Spanish upon their selection of the friendship locale than upon the selection of the religious one, and upon the selection of the friendship topic than upon either the selection of religious or educational topics). In addition, all domains became somewhat less different from each other in language

Table 3

SPANISH AND ENGLISH USAGE SELF-RATINGS IN VARIOUS SITUATIONS FOR COMPONENTS SELECTED

I. Congruent Situations: Two "congruent" components presented; S selects third congruent component and language appropriate to situation.

Congruent Persons Selected

	Parent	Friend	Total	Priest	Teacher	Employer	Total
Mean	2.77	3.60	3.27	4.69	4.92	4.79	4.81
S.D.	1.48	1.20	1.12	.61	.27	.41	.34
N	13	15	15	13	13	14	15

Congruent Places Selected

	Home	Beach	Total	Church	School	Work Place	Total
Mean	2.33	3.50	2.60	3.80	4.79	4.27	4.27
S.D.	1.07	1.26	1.10	1.51	.58	1.34	.94
N	15	6	15	15	14	15	15

Congruent Topics Selected

	Family	Friendship	Total	Religious	Education	Employment	Total
Mean	1.69	3.30	2.64	3.80	4.78	4.44	4.38
S.D.	.92	1.20	.95	1.47	1.53	1.12	.73
N	16	18	18	15	18	18	18

II. Incongruent Situations: Two "incongruent" components presented; S selects third component and language appropriate to situation.

Persons Selected

	Parent	Friend	Total	Priest	Teacher	Employer	Total
Mean	2.90	3.92	3.60	4.68	4.77	4.44	4.70
S.D.	1.20	.64	.70	.59	.48	.68	.52
N	16	16	16	14	15	9	15

Table 3 continued

II. Incongruent Situations, continued

	Places Selected						
	Home	Beach	Total	Church	School	Work Place	Total
Mean	2.63	3.86	2.77	3.71	4.39	4.42	4.10
S.D.	.77	.94	.70	1.32	1.90	.96	.82
N	15	5	15	15	15	15	15

	Topics Selected						
	Family	Friendship	Total	Religious	Education	Employment	Total
Mean	2.83	3.81	3.26	3.07	3.66	3.81	3.49
S.D.	1.04	1.13	1.02	1.00	1.20	.85	.76
N	18	16	18	18	17	18	18

selection following hypothetically incongruent situations than following hypothetically congruent ones. However, this finding was less evident in those situations of which the selected third component was a Person, than in those in which it was either a topic or place.

An analysis of variance of the mean language usage scores obtained for hypothetically congruent and incongruent situations in which the selected third component was related to Intimacy and Status, is shown in Table 4. The significant Value Cluster effect, $F(1,135) = 161.28$ ($p < .01$), was obtained as a result of the fact that more Spanish usage was reported for situations in which the selected third component was related to intimacy than for those in which it was related to status. The significant Value Cluster by Congruency (AB) interaction, $F(1,135) = 14.4$ ($p < .01$), is indicative of the fact that the difference in reported language usage between intimacy and status related third components was smaller for hypothetically incongruent than for hypothetically congruent situations. The significant Component by Congruency (AC) interaction, $F(2,135) = 2.27$ ($p < .05$), is indicative of the fact that the relationship found between Value Cluster and reported language preference was more apparent for situations completed with the selection of a Person or Place than for situations completed with the selection of a Topic. The significant Value Cluster by Component by Congruency (ABC) interaction, $F(2,135) = 3.52$ ($p < .05$), is probably due to the fact that the interaction between Component and Value Cluster was less strikingly evident in hypothetically congruent than in hypothetically incongruent situations.

Discussion

Our predictions regarding the selection of the completing

Table 4

ANOV. OF MEAN LANGUAGE USAGE RATINGS OBTAINED FOR CONGRUENT AND INCONGRUENT SITUATIONS AND FOR INTIMATE AND STATUS RELATED THIRD COMPONENTS

Source	SS	df	MSS	F
Total	24437.441	192		
Between subjects	8897.190	48		
Component (C)	1836.573	2	918.287	5.983**
Subjects within component	7060.617	46	153.492	
Within subjects	15540.251	144		
Value Cluster (A)	7750.105	1	7750.105	161.282**
Congruency (B)	.322	1	.322	.007
A x B	694.545	1	694.545	14.454**
A x C	217.670	2	108.835	2.265*
B x C	52.204	2	26.102	.543
A x B x C	338.269	2	169.134	3.520*
Error Term[3]	6487.136	135	48.053	

* $p < .05$
**$p < .01$

elements for both hypothetically congruent and hypothetically incongruent situations were for the most part confirmed, thus validating our hypothesis concerning which domains exist and which elements are representative of these domains in the community under study.

The fact that a greater preference for use of Spanish was reported for situations in which the selected component was related to intimacy than for those in which it was related to status is in accord with the hypothesis that bilingualism in the community studied fits the model of diglossia as proposed by Fishman. In addition, the substantially similar results found for congruent and incongruent situations, in accord with the model, suggests that incongruent situations were reinterpreted by the Ss so as to be perceived as predominantly belonging to one or the other of the two major value clusters and as calling for the use of the language appropriate to that value cluster. However, whereas all three components seemed to be related to reports of language preference, Topic was found to be somewhat less related to such reports than either Person or Place. This apparent difference corresponded to the fact that the selected third component was made congruent with Topic less often than with either of the other components, which suggests that for our Ss Topic was generally the least significant of the three situational components.

These conclusions, however, are open to question because the situations which were completed differently by S also differed in terms of the components which were provided by E. This problem occurred primarily because some components were selected more often in some situations than in others. For example, in the situation in which the components "home" and "how to do your job most efficiently" were provided, "parent" was selected as the completing element more often than "employer", whereas in the one in which "work place" and "how a son or daughter is expected to behave" were provided, "employer" was selected more often than "parent".

This problem could not be overcome by comparing Ss who for the same provided components selected different completing elements since for most situations there was insufficient variation on the components that were selected and also because the Ss who differed in their selections of the completing elements for any given situation may have also differed in other language related factors. Thus, it was possible that Ss who selected the school topic in order to complete a given situation were more Americanized than those who selected the family topic for completing the same situation.

In order to handle this problem it was necessary for E to provide all three components in such a fashion as to vary each of them separately while holding the other two constant. By proceeding in this fashion the effect of any one of the components on language preference could be studied independently of the effect of the others.

Such a procedure was used in Experiment 2.

EXPERIMENT 2

Purpose

The purpose of Experiment 2 was to retest our hypothesis concerning the relationship between reported use of Spanish and English and the major domains and value clusters in the community studied via a design which would enable us to also study the independent effect of each of the three situational components on language preference.

Method

Procedure

A new data gathering form was devised in which Ss were directed to imagine themselves in each of 41 situations (of which the three components included an interlocutor, locale and topic). Assuming that they and all of the persons mentioned knew Spanish and English equally well Ss were required to decide for each situation how much of each language they would be likely to use. In responding, S rated the situations described on a scale of 1 to 5, in which 1 = Spanish only and 5 = English only. Unlike the form used earlier in which only two of the three components of each situation were specified by E and where S selected the third one himself before indicating his language preference, the current form provided S with all three components of each situation and S merely indicated his language preference. The components utilized in this form were the same as those used in the earlier form and found to be representative of the domains of family, friendship, religion, education and employment.

In order to be able to study the independent effect of each of the three components on language preference, each of the intimate-related components was combined with the same two components as each of the corresponding status-stressing components. Thus, parent and friend each appeared in combination with the same topics and locales as did priest, teacher and employer, respectively; home and beach each appeared in combination with the same topics and persons as did school, church and work place; the family and friendship topics each appeared in combination with the same locales and persons as did the religious, educational and employment topics.

Subjects

27 Ss responded to the second form. Once again all of these Ss were members of Aspira and were apparently similar to the respondents included in Experiment 1 in all respects.

Data Analysis

Mean language usage ratings were obtained for situations comprising the same two components and either an intimate or status-stressing Person, Place or Topic, respectively, as third components. These means were compared in a 4-way analysis of variance in which the factors of Component, Value Cluster, Domain of Intimate component, and Domain of Status-Stressing component were studied.

Results

Table 5 shows the mean amount of Spanish and English usage reported for situations which consisted of various intimacy and status-stressing components. The adjacent row scores were derived from situations which comprised two of the same components and either an intimate or a status-stressing third component, respectively. For example, in row 1, the first two means at the left were derived from situations which consisted of the same locales and topics and either "parent" or "priest" as third components. The two means in the center were derived from situations which consisted of the same persons and topics and either "home" or "church" as third components. The two means on the right of row 1 were derived from situations which consisted of the same places and persons and either the family or religious topics, respectively, as third components. Similarly, in row 2, the two means on the left were derived from situations which consisted of the same locales and topics and either "friend" or "priest" as third components, etc.

Table 5

MEAN LANGUAGE USAGE OBTAINED FOR SITUATIONS CONSISTING OF INTIMACY (FAMILY AND FRIENDSHIP) RELATED AND STATUS (RELIGION, EDUCATION AND EMPLOYMENT) RELATED PERSONS, PLACES AND TOPICS

(1 = All in Spanish; 5 = All in English)

n = 27

Domains Compared within Intimate and Status Value Clusters	Component					
	Person		Place		Topic	
	Intimate	Status	Intimate	Status	Intimate	Status
Fam & Relig	2.6	3.5	3.0	3.1	3.1	3.0
Friend & Relig	3.9	3.7	3.8	3.8	3.9	3.8
Fam & Educ	2.7	4.5	3.5	3.7	3.6	3.7
Friend & Educ	4.1	4.6	4.4	4.3	4.3	4.4
Fam & Empl	2.7	4.4	3.5	3.6	3.5	3.5
Friend and Empl	3.9	4.5	4.2	4.2	4.1	4.2
Total	3.31	4.18	3.73	3.78	3.73	3.77

An analysis of variance of these results appears in Table 6. The significant Value Cluster effect, $F(1,910) = 69.82$ ($p < .01$), is indicative of the fact that more Spanish was reportedly used in situations which consisted of intimacy-related than in those which consisted of status-stressing components. The significant Domain of Intimacy component effect, $F(1,910) = 333.2$ ($p < .01$) reflects the fact that more Spanish was reportedly used in situations which consisted of family-related persons, places and topics than in those which consisted of the corresponding friendship components and the significant Domain of Status component effect, $F(1,910) = 70.9$ ($p < .01$), is indicative of the fact that more English was reportedly used in situations consisting of education and occupation-related persons, places and topics than in those which consisted of the corresponding components associated with religion. The significant Component by Value Cluster (AB) interaction, $F(2,910) = 52.6$ ($p < .01$), resulted from the fact that the relationship between Value Cluster and language preferences was obtained only for a difference in Person but not, surprisingly, for either a difference in Place or Topic. The significant Component by Value Cluster by Domain of Intimacy component (ABC) interaction, $F(2,910) = 21.76$ ($p < .01$), was evidently due to the fact that the difference in mean ratings obtained between parent and priest, teacher and employer combined was greater than the difference in ratings obtained between friend and the latter three interlocutors combined. This was also evident from t tests which indicated that while the latter difference failed to reach significance, the former was significant ($p < .01$). Similarly, the significant Component by Value Cluster by Domain of Status component (ABD) interaction, $F(4,910) = 4.31$ ($p < .01$), was

Table 6

ANOV. OF MEAN LANGUAGE USAGE RATINGS GIVEN FOR VARIOUS SITUATIONS COMPRISED OF INTIMATE AND STATUS STRESSING COMPONENTS

Source	SS	df	MSS	F
Total	81389.909	971		
Between subjects	19287.298	26		
Within subjects	62102.611	945		
Component (A)	.000	2	.000	.000
Value Cluster (B)	2593.957	1	2593.957	69.826**
Domain of Intimacy Component (C)	13244.828	1	12344.828	332.306**
Domain of Status Component (D)	5273.294	2	2636.647	70.975**
A x B	3913.505	2	1956.753	52.673**
A x C	.000	2.	.000	.000
A x D	.350	4	.087	.002
B x C	1263.211	1	1263.211	34.004**
B x D	551.124	2	275.562	7.418**
C x D	73.483	2	36.742	.989
A x B x C	1616.980	2	808.490	21.763**
A x B x D	641.053	4	160.263	4.314**
A x C x D	.350	4	.087	.002
B x C x D	8.748	2	4.374	.118
A x B x C x D	16.096	4	4.024	.108
Error Term	33805.632	910	37.149	

* $p < .05$
**$p < .01$

evidently due to the fact that the difference in mean ratings obtained between priest on the one hand and parent and friend combined on the other was smaller than the difference in mean ratings obtained between either teacher or employer on the one hand and parent and friend combined on the other. This is also indicated by the results of t tests which showed that while the former difference was not significant, each of the latter differences attained significance ($p < .05$). Thus, Spanish appears to be used most frequently in situations consisting of parent, least frequently in those consisting of teacher or employer, and used with intermediate frequency in those situations consisting of friend or priest.

Discussion

The finding in Experiment 2 that of the three components only Person was significantly related to reported language preferences differs from the results of Experiment 1 in which it was found that all three components appeared to be significantly related to reported language preferences. This discrepancy is probably due to the fact that in Experiment 1 it was not possible to study the effect of a difference in any one component while the others were held constant, whereas this was accomplished in Experiment 2.

Although the instrument used in the first experiment did not permit the three components to be studied independently of one another, it nevertheless may have a number of positive features which seem to be lacking in the second instrument. For example, with the first instrument it was possible to study which components were viewed as congruent and how the Ss resolved the various incongruent situations provided by E. In addition, since they were partially constructed by the Ss themselves the situations included in the first approach most probably appeared more naturalistic than some of those which were devised n the second form entirely by E.

Summary

Two situationally based self-report instruments for describing language use were administered to groups of bilingual Puerto Rican youngsters living in New York City. The two instruments were similar in that they each described a number of hypothetical conversations in connection with which Ss were asked to decide on how much Spanish and English they would be likely to use. The three components of each of these conversations were: Person, Place and Topic. These components were planned to correspond to one or another of five different domains of social interaction in the Puerto Rican community, namely, Family, Friendship, Religion, Education and Employment. Ss were instructed to assume that they and all of the persons mentioned in the hypothetical conversations knew Spanish and English equally well in order to yield the norms related to communicative appropriateness rather than to reflect language mastery per se. The two forms differed in that the second presented situations in which all three components were described by E, whereas the first consisted of situations where two of the three components were described by E and Ss were instructed to select the third one themselves (before deciding on which language was appropriate in the situation so constituted). With the second instrument E was able to systemmatically vary each of the three components separately while holding the others constant, while in the first, it was possible to study language use in relation to more naturalistically appearing situations than with the second.

The results obtained with the two instruments suggested that in the community studied the amount of Spanish and English used for conversation differs according to the domain of interaction. Use of Spanish was reported primarily in the domain of family, secondarily for the domains of friendship and religion and least of all in those of education and employment, while the reverse held true for English. In the more naturally appearing situations, where differences in selected interlocutor were found to covary with differences in place and topic, language preference was found to be related to differences in person, place and topic. These differences, when systemmatically studied in experimentally controlled situations, were found to be almost entirely the result of interlocutor differences that were associated with these domains and minimally the result of their differences in topic and locale. Both instruments yielded important data and must be used in full awareness of their complementary assets and limitations.

Footnotes

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2. The authors wish to thank Dr. R. L. Cooper for his advice and encouragement during all stages of the work reported here.
3. A pooled error term was used in this analysis as the separate error terms obtained were similar.

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Chapter
III-3-b

INSTRUMENT CONSTRUCTION TRY-OUT

(Tape A, Informant P_2)

La:...Let me ask you this, is it hard to imagine these situations sometimes?

Tr: Very hard. Haven't had any of them.

La: You never bumped into these situations.

Tr: Well, I mean, uh, clubroom, yes, and ah...

La: Parent in the clubroom?

Tr: Y- Hispanic professors I've had.

La: What about parent in the clubroom?, talking about what is a good career to choose.

Tr: Yeah, I've heard them speak, too, on that, and it's in Spanish, though. It might turn out to be better in English. That's why I did give it more of an English leaning, didn't I?

La: No, you hadn't come up with that one, what would you rate it?

Tr: About two, no more. No; more of an English, to an English leaning.

La: What would you give it a rating?

Tr: Um...'bout two.

La: All right, and what about ah...parent in the classroom?, about what is a good career to choose?

Tr: Um...the best instrument there would be in English, about uh, a four.

La: Best instrument? What do you mean by that?

Tr: The language is an instrument.

La: Do you think that English would be used?

Tr: English would be used?

La: By your mother?

Tr: If she knew it I think she would. Especially to apply it particularly to the society...what it stresses, I mean, you can't say it. You could say it in Spanish but it would take so much more than if you said it in English.

La: What would take so much more?

Tr: The explaining or saying how you should choose a career. I think it would be better to go along.

La: You mean Spanish doesn't have the words?

Tr: It has it. But I think it would be more compact if you said it in English.

La: What do you mean by compact?

Tr: Rather than go around in Spanish. If you're going to speak about careers here in New York City, you'd have to know all the technical terms, sometimes you know like, you might speak about medicine, or speak about sociology and medicine or something like that, and I think it would come out much better if you said it in English.

La: Because of the terms that you might not know technically.

Tr: Yeah, terms, and, well I think terms would be one of them...

La: Anything else?

Tr: Appropriateness, again...

La: What do you mean by that?

Tr: To the subject. Just let me think. Well, it's appropriate in Spanish, but not to the degree that it would be, let me see, how could I explain that...

La: Can you write it?

Tr: I don't think I could. Let me see. You have a society, right?, where the majo-, the stress is on careers, maybe it's on education, higher learning, and the idea, especially of a Puerto Rican person, would not be so much to go around, you know, in careers and formal education. So I think the best instrument to use there would be the language of Spanish.

La: Language of what?

Tr: The Spanish language.

La: For what?

Tr: The English language, for careers.

La: So supposing you're talking to your parents in the home about how to choose a good career, what is a good career to choose.

Tr: That'd be four. I find that my father is the one who understands English. I find it's so much easier to explain in English than it is to explain in Spanish.

La: And so what would you rate it?

Tr: About a four. Cause there are a few words that I use that can't be translated into English. Ambiente, environment, I don't know.

La: What?

Tr: Environment. Ambiente. I want - Yo quiero encontrar un buen ambiente, a good environment, but you don't mean just environment, you know, surroundings and all that...

La: You say that for career?

Tr: Yes, let's say I wanted to go away to Puerto Rico, right? To study sociology. If I didn't to go...Let's say...This was an actual I was going...I was trying to convince my mother that I didn't want to go to Puerto Rico to one of the small towns, I wanted to go to a big town where there was ambiente, where there was an environment...but it was at...where I would actually make some progress, you know some kind of...thrive on, you know, where I could really do well.

La: So how did you explain it to her?

Tr: In Spanish.

La: You explained the whole bit in Spanish?

Tr: Did I explain it?

La: You explained the whole desire in Spanish?, what you wanted?

Tr: Yeah. "Lo que yo, lo que yo quiero hacer es irme pa Puerto Rico y no para una de las, de lo, de las ciudades pequeñas o de un pueblo o de un barrio, pero quiero irme a una ciudad grande adonde haiga ambiente para poder perseguir la carrera que yo quiera y, este, tambien en el ambiente que escoja, voy a tener que poder, este socializar al nivel mío, al nivel que sea apropiado a la carrera que yo he escogido, los cliente, el sueldo..."

La: That's what you told her.

Tr: Yeah.

La: How did she feel about this?

Tr: Well, she didn't like the idea of my going away from the family, cause that would mean breaking off ties, but she realized the idea about ambiente, that you do have to find a place where, that's conducive to whatever you're doing. That, you know, you could get your daily bread, and better than perhaps my father and she ever did...But the whole idea of breaking ties with the family was not good.

La: You mean she saw this as a break of ties?

Tr: Yeah, mhm.

La: The fact that you wanted...

Tr: To go and work for myself.

La: And did you ever have this discussion again, or was that the only time?

Tr: No, we had it on Saturday with my father and mother. Yeah, I'm planning to go away as soon as I graduate next year.

La: And when you have these discussions with them, what language do you use?

Tr: Spanish.

La: All in Spanish?

Tr: Yeah, because my father...I explain to my father in English, and he says "no, don't tell me in English because I want your mother...and I want to understand fully, and you know Spanish as well as I do."

La: But you started using English?

Tr: Yeah, I started using English. I thought it would be easier to speak in English. Then I found that I knew some words which would be much simpler to explain...I told my father I was going for a better place, better, you know, ambiente was the word..Yes I spoke in Spanish...

La: But you started to speak in English?

Tr: Mhm.

La: Why?

Tr: Because it's my father. It was simple to speak in English and tell him the same story.

La: And he said "no"?

Tr: He said "no", he said that didn't tell him anything...He says... that doesn't...because you have, over there you're just a woman by yourself and it's not good.

La: He said that in English?

Tr: Yeah.

La: And then when did he tell you to start talking in Spanish?

Tr: Oh, when my mother came in. He said "tell your mother."

La: Did he object...So when did he object to the use of English.

Tr: Oh, when my mother walked in...He said "I don't want to discuss it any more in English, I want your mother to understand and I want to be able to understand it just as well. Speak in Spanish 'cause you can speak just as well as I can." Then we spoke in Spanish.

La: You mean he actually directed you to speak in Spanish?

Tr: Yes.

La: Did that ever happen before?

Tr: Yes. It happens all the time.

La: When do you...you mean you'd start speaking in English and he says, what's he call you?...

Tr: Trini.

La: ...Trini, speak in Spanish?

Tr: Yes. He says...

La: When else does this happen?

Tr: When he's mad, and he starts a discussion; at the family meetings I told you about. If we had a family meeting, like he might call an emergency meeting, and it might be because he was mad at someone, mad at something that someone did, or something like that. Or we might call it because it because we're mad at something they did, or something like that, and we speak Spanish there, all the time, even my brothers who don't speak Spanish very well at all, speak Spanish; have to speak Spanish.

La: When who's there do you have to speak Spanish?

Tr: When, either, when we call a meeting of the family where there are more than three people who are, we speak in Spanish.

La: And does your father tell you to speak in Spanish at that time?

Tr: Yeah, he always tells us to speak in Spanish, whenever...

La: You mean the family meeting starts off in English?

Tr: The family meeting starts off in English, right. And then he says, but I won't...when we were younger, he said he wanted us to get into the habit of speaking Spanish, so we conducted the meetings in Spanish. Now, you know, we can conduct the meetings in any way we want, but when he especially has a point, Spanish is the language to be spoken.

La: What kind of a point?

Tr: Like he might be mad because perhaps my brothers have been staying out too late, or there's an abuse of my mother's niceness...we don't wash dishes or help around the house and like that, he calls a family conclave and we discuss it, and there he will talk it over in Spanish. I think it's mainly because my father has some difficulty with English, you know, he does have some difficulty but he understands. But he wants to, when something like this comes up where there are minute points, he wants it in Spanish. It happened also during my college, when I was applying to Massachussetts, Springfield College, and there was a big argument, again about my breaking ties with the family, and he said "we want to speak Spanish so I understand everything."

La: Tell me what...

Tr: I had gotten a scholarship to go to Springfield,...and it was late, because they hadn't even approached me with the scholarship until very late. So I brought it over to my father, I said, "you gotta sign these by tonight." I wasn't of age yet. "You have to sign this by tonight so I can mail it." And he says, "No, let's talk it over, discuss it first," so we sat down and we had a family meeting, and my brothers and sisters were in favor of that I should go away, and that it wouldn't take much time, you know, to come back and go forth, and he said about the expenses, but the scholarship, it was a full scholarship, and I could work part-time. "No, you have to think about you have no supervision and you're yet a young girl." He said there was a lot of things that had to be done with my education, and that didn't just mean formal education. I knew what he meant and all. So the thing...what resulted from it was that I didn't get to go to Springfield; I couldn't accept the scholarship, he wouldn't sign the papers, so I didn't go. And I went to another college instead. I accepted his decision, though.

La: Did you ever bring it up again?

Tr: Yes. Last year it came up again. I was planning to get out of Hunter and go to college outside of State, just to get away from too much dependency on the family. So I had to call my father over. He says, "you know, you're not sure of getting into a college now," and he starts again, "Tell me in Spanish, how would it work?" And I knew perfectly well he would understand, and... Sometimes I gather that he knows I have a handicap in Spanish, you know, somewhat; and he has a handicap in English, so he uses my handicap, you know, to get his way.

La: And do you ever reverse it?

Tr: Yeah. Whenever I feel like it I talk in English. But if he tells me, you know, "Talk in Spanish, we have to talk in Spanish."

La: Well, you say he uses your handicap, do you ever use his handicap?

Tr: Yeah. I do it every once in a while, but not for any big things, cause he doesn't fall for it...like that. I might use words that he doesn't know very well.

La: Why?

Tr: Just to get him, you know; if he doesn't understand it, like he won't readily admit it. So I, you know, tell him I'm going to - a - one time I said symposium, and it was just a simple meeting. I had some work to do in my house. This is so hilarious...and I said, "Well, there's a symposium of the professors of so-and-so." It was a direct lie; it was a lie, and yet I used the words, you know, just to get him to say, "Oh, all right," you know, since he didn't know about it; and he comes up next week and he says, "oh, how was that symposium, I understand that it's ah..." And he had looked up the definition of it! And I said, "Oh, it was very nice." And he said "How did they speak, was the answer, question-and-answer period good? What did they speak about?"

La: How did he ask you that?

Tr: He asked me in English.

La: Why?

Tr: Because he had found out what it was, and...then he wanted to know.

La: Why do you think he looked it up in the dictionary?

Tr: Oh yeah, that he alw- He has a notebook of vocabulary, at home.

La: Why do you think he looked that word up particularly and brought it up next week?

Tr: Because it bothered him that he didn't know the word. That's part of the beauty of my father, he likes to learn new words. And this was something that I had thrown him just like that, you know, so, you know, he thinks, "Let's look it up and see what it means," you know, "my daughter's getting smarter than I am" and all this. Now he's getting all upset because he thinks college is going to our heads, because there are three of us in college; and one is going into Columbia University in September. So he's a little upset about everybody making it through college and everything. And I told him, that's what we said Saturday: it's only a growing process; and they always, he always wants to keep us so much dependent. Authority. Puerto Rican fathers are always very authoritarian. We've taken it all in stride, except once in a while when you can't just take it.

La: And how do you express yourself?

Tr: In Spanish, for any major debates, as I said, and for, you know, any minor points or something in English. Now, my brother, especially the younger one, my brothers, Orsini, he's the one who speaks mostly in English, because he can speak ah- and my father forgives him - he can speak in English.

La: Is he highly educated?

Tr: Who, my little brother or my father?

La: Your little brother.

Tr: No, he's just smart.

La: What?

Tr: He's the smart one.

La: He is highly educated?

Tr: Yeah. No, wait a minute, not at home. What do you mean, buen educado at home?

La: No, I don't mean buen educado. I mean highly educated in the American sense.

Tr: Yes.

La: Where did he go to school?

Tr: He goes to Morris High School. He's in the honor school there, and...

La: Well, why isn't your father worried about him?

Tr: He is worried about him, he won't let him go away to college. Oh, he's worried about the whole business of the dependency and all that. Not worried about Spanish.

La: Does your brother ever argue with him?

Tr: Yeah, but he's more submissive.

La: And what does he use when he argues with him?

Tr: He, first my father tells him to speak Spanish, so he tries, but he can't, so he goes back to English, so my father doesn't mind. Cause he knows he can't. Then it would be no conversation between them.

La: But you ah...

Tr: With me it's simple.

La: If you're having a major debate, tell me about, when you say major debate, you use, you start off in English, is that true?

Tr: Mhm.

La: And then you go into Spanish, with all major debates.

Tr: Right. Any major problems, anything about...

La: Now you brought up before a, let's go back. You told me that Aspira offered you a scholarship, and...can you think back to that time when you wanted to come into your Dad with the information. Can you remember what you said to him?

Tr: ...In Spanish I told him...I approached him in Spanish because I knew what would happen. So I, no, but I was expecting to have a favorable reaction, not an unfavorable, and I said "Papi, me dieron la beca para asistir a un colegio en Massachussetts." And he said, "Oh, sí, y cuanto cuesta eso?" Right away, you know, "How much does it cost?" I said, "Well, they're giving me a scholarship." Le dije que era una beca, and, you know, I explained about the scholarship, in Spanish, and he says "(...) You can't go away." And I said, "Why not?" "Because you have no," - this he said in English, which surprised me - "there's no supervision. You have no supervision if you go away." I said, "What do you mean? Do you think I'm still a child? I'm eighteen years old. I have nothing, you know, to hide from you and you know how I am, and you should have a little trust in me." He said, "Pero" - and he starts in Spanish - "no, eso no es la cosa, que tu siempre no entiendes las cosas..." "You never understand..."

La: When you said that business about trust, was that in English or in Spanish?

Tr: No, I said it in Spanish. "Que debe tener un poquito de confianza conmigo, que yo no, yo creo que tu tienes fe en como me criaste," and the whole thing about how I felt. He said, "No, absolutely no, que no puedes ir, que eso de no tener supervisión, que es lo mismo que" - oh he wouldn't let me go to the University of Puerto Rico because of the same reason. I would be in San Juan, and I have no family in San Juan, except an aunt, and she's over in a hospital, a nurse, so she couldn't supervise me, so he wouldn't let me go there either. He wouldn't let me go to Springfield for the same reason. Then, I argued it, you know, back and forth, in Spanish. Then he called my mother in; and my mother had to go along with him, so...

La: Did you ever switch into English at any point?

Tr: No.

La: Why?

Tr: Because, first of all, mother wouldn't understand - I was hoping to get her on my side. Then my father demanded, you know, after we had started in English, and he had started it, demanded to speak in Spanish so he could understand and so I could understand.

La: What did you say when you started? You said you started...

Tr: No, he started, he said, I started in Spanish, I said "Que tengo una beca, de un ah colegio en Massachussetts" and all, then he says, he asked me how much it would cost, and I said, you know, how much it would cost and all that, but that I had a scholarship. Then he says, "but you have no supervision, but there's no supervision," in English, "but there's no supervision there" and all that. I said, "Pero Papi," and I started off, as soon as I said Papi I started off just immediately talking in Spanish.

La: Do you think that was a device, to get his, to win him over?

Tr: It might have been, might have been, but I'm used to, you know, again, speaking in Spanish.

La: Well you said you wouldn't take any chances with that conversation and you went right in and started off in Spanish.

Tr: Yeah it might be....it might be taking advantage. Just trying to get him to understand, you know, well, be a little bit on my side, so it was better in Spanish.

La: So you think the fact that you used Spanish in that conversation was, as a device so that you might win him in the ah...

Tr: Yeah, I think it was. Yes, very much so. That's why I started off in Spanish to begin with.

La: And he switched off into English. Why do you think he did that?

Tr: To get me to understand a minute point, I guess. Or to make it final, that would be one of the things.

La: "You have no supervision" would make it final? More authoritative?

Tr: Yeah.

La: So he uses English to establish authority?

Tr: Sometimes he does.

La: Could you give me another example?

Tr: Yes, it's very easy, um, oh, in Saturday's meeting, - that was a meeting-and-a-half - Saturday's meeting, my brother is seeing this girl, and he's seeing her too often, he's only eighteen, my father says; and he started talking to him - we had started in Spanish - we had started in English and then we switched off to the Spanish. Then in the middle he starts talking about (Millie), this girl my brother's going out with; and he says, "You know why, it's not that I want to be a bad father or anything, but it's just that I would like you to see other girls besides just this one girl. You're only eighteen years old." He spoke to him in English, not in Spanish. It was an attempt to get down on my brother's - you know, so he would understand but not say it in Spanish; Spanish has a, you know, like it's a big thing when he speaks in Spanish. But it just might be the reverse, of authority, because that makes it the reverse.

La: Excuse me?

Tr: That reverses it from the last situation, why he moves to English. That last pattern, why he used it this time. It was just sort of to soften the blow this time, and last time I think it might have been to soften the blow, too, you know that, "no supervision, there's no supervision" - did it in English so I would get the idea that he was trying to make me understand, just like he did on Saturday.

La: Who?

Tr: To my brother, to get him to understand that, to get the idea that he is not trying to tell him not to do it or what to do or anything like that, but that it would be best.

La: In other words, he used, you used Spanish as a device to get on his side, and he used English as a device to get on your side?

Tr: Very possible. We're a very divisive family.

La: Do you really think that?

Tr: No, I didn't, ah, I wouldn't say exactly that. It's just when my father wants us to especially understand that he might attempt to explain it all in English. Then at the times when he wants to fully understand he uses Spanish.

La: But if he wanted to soften the blow why would he, ah, desire that the whole argument be kept in Spanish in your case.

Tr: He's putting his foot down.

La: When he puts his foot down it's in Spanish?

Tr: Yeah, the major thing is in terms of Spanish.

La: And when he tries to act a little soft?

Tr: Yeah, then he uses English.

La: He switches into English and the device works? Do you sense it when it happens?

Tr: Sometimes he uses the wrong words.

La: But, I mean, you get a feeling what he's trying to do when he does it.

Tr: Once in a while - not all the time, you know, I'm used to having him speak in English or Spanish so it doesn't - and I speak to him in English or Spanish. Sometimes I felt that he was trying to get me, you know, sometimes you do it to a child you go very slowly and you try to make them understand and you try to implant in them what your feeling is. So my father, I get, the feeling, sometimes he does just that. He can do it in Spanish too, and he does it in Spanish more often. As if deliberately going over something slowly.

La: Is that what he did in that argument.

Tr: Yeah, the beginning but after a while, "No, we won't discuss it any more."

La: You mean to say he shifted his mood when he shifted language.

Tr: No, yeah, that's right he did because I started talking back to him in English about not trusting me and all that in Spanish and I started telling him, you know, "Don't you have confidence in the way you raised me. It's been eighteen years and once in a while you're going to have to let go." When I said those things he got really upset and he said, "No, you're finally not going."

La: In English?

Tr: Yeah.

La: You said you told him in English?

Tr: I told him in English, yeah, and he went, "No, ya di la palabra no vas a ir."

La: Explain to me how he switched mood by switching language.

Tr: No, when I switched language he switched mood.

La: Oh! When you switched language.

Tr: Yeah.

La: I was wondering if he had switched language in order to soften up a bit rather than show authority.

Tr: He had. That's why he had used English and when he used English, I immediately went to English.

La: Oh, and then he went back to show authority? So in other words it went back and forth, from authority to softness to authority. And what was the language of authority?

Tr: The language of authority was Spanish.

La: And the language of softness?

Tr: English.

La: In his case.

Tr: Yeah, English. And in my case I used Spanish to try to talk him into it.

La: And when you wanted to show authority?

Tr: When I wanted to put across a point.

La: When you wanted to impress him?

Tr: Spanish.

La: Impress him with your knowledge, education.

Tr: Oh, that was English.

La: When did you do that?

Tr: Everytime when I went to that meeting. The meeting I went to.

La: Would you do it again?

Tr: No. I don't need to anymore.

La: I mean did you ever do it before that?

Tr: Yeah, I used to quite a bit. You see my father grew up with English with us. It was like he was here two or three years before us but essentially where he got his knowledge was going up from first grade, all the way with us. There came a point where we were learning too much for him to absorb, unless he went to school and he tried to go to school, you know, at night but he couldn't and carry on with the work. So what he did was keep a notebook of what we said and words that he didn't know he would ask us. He just likes to know what's going on. When I felt he wouldn't know something, say about 7th, 8th or 9th grade, you know, if you wanted to go to a dance, I'd tell him in English. After a while it didn't work - he knew but sometimes it worked, sometimes it didn't.

La: You wanted to go to a dance, he wouldn't let you go.

Tr; Oh no, if I went to a dance I went with my mother.

La: And if you wanted to go you'd use English?

Tr: I would get my mother's O.K. but I would go rattling off to my father that I was going out and mommy was going with me, without asking my mother. Sometimes I wouldn't ask my mother but if my father said it was all right my mother would have to go. So I would just rattle off and he'd say, "O.K., tell your mother to go with you" or else he'd say "take your brother or sister."

La: Where were you born?

Tr: Puerto Rico.

La: What age did you get here?

Tr: Seven, going on seven.

La; Is this a common custom for people born here or only for those who come from Puerto Rico?

Tr: Whoever has a generation of parents, I found this true, that were born in Puerto Rico, it's true. You don't go in the early teens to about sixteen or seventeen. Sometimes some parents are more lenient. But you either have to go with your mother or some girl there.

La: Well, I mean you told me some very fascinating things about Puerto Ricans. Very interesting, really.

Tr: Any other questions?

La: Well of course I have many other questions but I think I asked enough questions.

Tr: Can I make a phone call home to my mother? I wasn't expecting to stay this late.

"Hello, Mark, could you put mommy on the phone.

Hello ma. Mira estoy todavía en la entrevista, la entrevista que yo te dije con el señor. Pues ya yo voy para casa, ya voy a salir. Para una cuenta que están cojiendo de los puertorriqueños. Si, yo llego como a las diez y cuarto. Estoy en la catorce. Yo estoy aquí, estoy en la oficina, de aquí es que estoy llamando. O.K. Sola. Bye. La bendición."

You can't say bye without - she said, "La virgen te acompañe," it's in answer to something I hadn't asked, "Bless me."

La: You mean you say "bless me."

Tr: I say, "la bendición" - "the blessing." She says - no, when you come into the house we say "la bendición" when we - like she might be talking to her son on the phone and after she finishes she says she says, "la virgen te acompañe" - "the virgin bless you" and I'd say "la bendición" even though I'm supposed to ask he first she answers. It's habit.

La: When you say good-bye you bless her.

Tr: Yo le dije "la bendición". I told her "la bendición" - "bless me." She uses all kinds of blessings.

La: Oh! She blesses you.

Tr: Yeah, no, I ask her for the blessing.

La: Oh and then she gives you the blessing?

Tr: What she did was that I always forget so she answers so that I come up with the question.

La: I see, "you are welcome" (like). So she told you to be careful.

Tr: Yeah. She said, "be careful all the way down there" - she asked me where I was, I said 14th street and she said, "you're all alone down there" and I said that I was. "Sí, estoy sola."

La: She said that in English or Spanish?

Tr: No, Spanish.

La: Everything she said in Spanish?

Tr: No, she said "be careful" in English and then I said, "yes, I'll be careful."

La: You said it in English, too?

Tr: Yeah. They start up, you know. My mother though, you can go up to a point. She's been here 15 years now and she still hasn't learned English. I mean we could talk to her in English and she'll understand but she refuses, she went to school for it, too, for three and she can write but she will not talk. Recently, she's been using English because we don't laugh. When we were young we used to correct her a lot that was the whole thing. If we corrected my father, well - . My father decided he had to go out to work and he had to learn English. My mother stayed home with us and if he came home and she wanted someone to look at our homework she told my father to look at it unless it was for numbers.

La: It seems your parents use English when they want to stress the importance of what they're saying.

Tr: Like "be careful," right.

La: They want to make sure you understand.

Tr: Ten cuidado. Be careful. I was telling you how do we take it and I made a speech about this at Columbia University a while back. I had to evaluate exactly how the two cultures, language, everything had effected me. When you come down to thinking about it and I was in my young teens it was exactly this conflict, the whole conflict about the two cultures. What do you do about them and how do you sort of accommodate yourself to both. Even right now, I'm 21, my sister's 20, the other 19 and the smallest is going to be 18 and we're having so much difficulty. My father has been here so long that he knows what the customs are and what they aren't cause he mixes pretty well. He holds a job where the people have older children and he thinks Americans don't raise their children with enough severity and some kind of respect. They can leave the house anytime they want. We were having one of the big arguments was precisely that on Saturday which is a big to do in my house. About our conception of going to college. He said were trying to be better than my parents, better than my father - not my mother, that we wanted to know more. That we should keep to our Puerto Rican culture, that girls should stay home.

Part IV

PSYCHOLOGICALLY-ORIENTED STUDIES

Chapter
IV-1-a

WORD FREQUENCY ESTIMATION AS A MEASURE OF DEGREE OF BILINGUALISM[1]

Robert L. Cooper and Lawrence Greenfield[2]

Psychologists have developed a number of indirect measures of degree of bilingualism or of the relative skill with which bilingual speakers employ their languages. These measures have been classified under four headings: rating scales, tests of verbal fluency, tests of flexibility and tests of dominance (Macnamara, 1967a).

The rating scales most frequently used are language background questionnaires and self ratings of language use. On the other hand, tests of verbal fluency are usually either measures of speed of response to verbal stimuli or of the number of responses produced within time limits. Ervin (1961), for example, compared the speed with which bilinguals were able to name pictures in each language and Johnson (1953) and Macnamara (1967b) contrasted the number of different words produced in each language within equal time limits. An example of a flexibility measure is Macnamara's richness of vocabulary tests in which Ss are presented with a series of phrases in each language, of the type "he is drunk", and are asked to write as many words or expressions as possible as are synonomous with the word underlined in the phrase. In dominance tests the bilingual is confronted with an ambiguous stimulus and is asked to pronounce or interpret it. It is assumed that his behavior indicates the language which he controls most fully.

Recently, the possibility of using word frequency estimation as a measure of bilingual proficiency has been suggested by the finding that individuals can accurately estimate the frequencies with which words appear in print. Thus Caroll reported that rankings of printed word frequencies obtained from monolingual Ss had substantial correlations with the rankings found in the Thorndike-Lorge frequency counts (Carroll, 1966).

The present study was designed to determine the utility of a word frequency estimation task as a measure of degree of bilingualism. The task employed in the present study differs from the one used by Carroll in that the respondents were asked not how often individual words appeared in print but instead how often they were encountered, i.e., heard or spoken.

Method

Procedure

As E read successive lists of 75 common Spanish and English words, S rated each item in terms of the frequency with which he heard or said it. The order in which the lists were read was randomized. In each language 15 words were selected by E to represent each of 5 domains of social interaction. These were family, education, religion, work and neighborhood. Of the 15 words in each language that were associated with each domain between 8 and 12 were translation equivalents. For example, some of the words associated with the family domain were home (casa), grandmother (abuela) and spoon (cuchara). The English words were drawn from the Thorndike-Lorge word frequency count (1944) and the Spanish ones from Eaton's Word Frequency Dictionary (1961). For each domain the mean frequency of occurrence of the printed words in each language was equal. The words were rated on a seven-point scale which ranged from "more than once a day" to "never."

The task was individually administered along with a number of other instruments during a tape-recorded interview. The interviews, which lasted between two and four hours, were conducted in the respondent's home or in a project field office in his neighborhood. The interviewers were bilingual in Spanish and in English and conducted the interview in whatever language or combination of languages was desired by S.

Subjects

The Ss who participated in the study were residents of a four-block area in the "downtown" section of Jersey City, New Jersey. Living in this area were 431 persons of Puerto Rican background. Of those 13 or older, who constituted 50% of the population, 48 participated in the interviews in which our data were obtained (Fishman, Cooper, Ma, *et al.*, 1968). Of the latter Ss, the WFE task was administered to 40.

Scoring

For each domain a mean difference was obtained between WFE ratings given for Spanish and English (S-E).

Criterion Variables

The obtained WFE difference scores were studied in relation to a number of criterion variables, including two self-rating scales, one fluency measure, and two linguistic variables.

Self ratings. In a sociolinguistic census of the community (Fishman, 1968) Ss were asked to report 1) the degree to which they used each language at home, and 2) their speaking facility in the two languages.

Fluency. During the course of the same interview in which word frequency estimates were obtained a Word Naming task was administered

(Cooper, 1968). This task required Ss to name (within 60 seconds) as many objects as possible that were found at home. Word Naming was conducted once in Spanish and once in English with each S. Word Naming performance was scored as the number of Spanish minus the number of English words produced.

Linguistic variables. The linguistic criterion variables were (a) an Accentedness score and (b) an English Repertoire Range score. The linguistic scores were assigned by two linguists who had completed a phonetic analysis of the speech produced by the same Ss during the course of two to four hour interviews (Ma and Herasimchuk, 1968). In the Accentedness scale, the Ss were rated in terms of the degree to which the phonological and syntactic structures of one language appeared to influence speech produced in the other. A seven-point scale was used on which high scores indicated Spanish influence on English speech, low scores indicated English influence on Spanish speech and intermediate scores indicated no influence of either language upon speech produced in the other. In the English Repertoire Range scale, respondents were rated in terms of the number of English speech styles which they appeared to use and the fluency with which they were employed. A six-point scale was used ranging from knowledge of only a few English words and phrases at one extreme, to the ability to employ both careful and casual English speech styles, in a maximally fluent manner, at the other.

Results

Table 1 shows the correlations of the Word Frequency Estimation difference scores with the various criterion variables. The Word Frequency Estimation difference scores for family and neighborhood best predicted the criterion variables, being significantly correlated with

Table 1

CORRELATIONS BETWEEN WFE DIFFERENCE SCORES AND CRITERION VARIABLES BY DOMAIN

	Domain				
Variable	Family	Education	Religion	Work	Neighborhood
Census ratings of language used at home	-58**	50**	62**	45**	49**
Census rating of speaking skill	41**	23	54**	28	37*
Accentedness	52**	39*	51**	33*	40**
English Repertoire Range	-69**	-42**	-44**	-27	-56**

*p <.05
**p <.01

Note:--The first three variables are scales on which high scores represent relatively greater Spanish usage or proficiency, low scores relatively greater English usage or proficiency, and intermediate scores "balance".

all 5 of them. Significant r's were observed between 4 of the criterion variables and the Word Frequency Estimation difference scores for the domains of education and religion, however, only 2 of the criterion variables were significantly correlated with the Word Frequency Estimation difference scores for the domain of work.

Self ratings of language use at home and Accentedness scores were each significantly correlated with Word Frequency Estimation difference scores in all 5 domains. English Repertoire Range scores were significantly correlated with Word Frequency Estimation difference scores in 4 domains, while self ratings of language skills and Word Naming difference scores wereeach correlated with only 3 Word Frequency Estimation difference scores.

Thus, in general, reports of greater use of Spanish than English words were associated with reports of greater facility in speaking Spanish than English, reports of more frequent use of Spanish than English at home, greater word production in Spanish than in English, predominance of Spanish accent in English and use of fewer speech styles in speaking English.

Discussion

The fact that the obtained Word Frequency Estimation difference scores for words related to family and neighborhood correlated significantly with all 5 criterion variables and that those obtained for words related to religion and education correlated significantly with 4 of the criterion variables, suggests that such difference scores are valid indices of degree of bilingualism. While the magnitude of these correlations equaled those obtained for more traditional global or noncontextual measures (Lambert, 1959), even higher correlations might have been found if the stimulus words had been supplied by a group of native speakers instead of by E, since it is possible that some of the words were unrepresentative of the domains in the community studied.

The Word Frequency Estimation task may fill several gaps left by other measures of degree of bilingualism. For example, since it may be possible to disguise its purpose, the Word Frequency Task might be used if S is reluctant to be truthful about his language usage or skill, whereas self - rating scales, whose purpose cannot be hidden, are unlikely to be valid. Furthermore, as it is likely that attitudes toward speed of response vary from culture to culture, Word Frequency Estimation, which is non-speed dependent, may be more valid for making cross-cultural comparisons of degree of bilingualism than are fluency measures, since the latter measures are heavily dependent on speed of response. Also, Word Frequency Estimation seems likely to be more easily designed to reflect the existence of domain related differences in degree of bilingualism than are either flexibility or dominance tests. This fact may be of importance in studying communities in which bilingualism is characterized by diglossia, i.e., where differential patterns of language use exist in different domains of social interaction (Fishman, 1968; Cooper, 1968; Edelman, 1968).

Footnotes

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Chapter
IV-1-b

LANGUAGE USE IN A BILINGUAL COMMUNITY[1]

Robert L. Cooper and Lawrence Greenfield[2]

The use of two languages for purposes of intragroup communication has been studied in relation to a variety of factors. The variables studied have often differed with respect to level of analysis, as some have pertained to individual differences among the members of the community under investigation and others to more general features of the social or socio-cultural context in which linguistic behavior takes place. As yet, no systemmatic attempt has been made to integrate these different levels of description.

Among the individual characteristics which have been found helpful in describing language use in a bilingual community are the linguistic proficiency, age, sex, occupation and education of the speaker and listener (Geertz, 1960; Herman, 1961; Rubin, 1962). For example, in a study of language use in Paraguay, Rubin found that in intimate conversation bilingual speakers of Spanish and Guarani tended to choose the language in which they were most proficient, namely, the first language learned. She also found that in choosing a language, the speaker would often estimate the linguistic ability of the listener, as in the case of a doctor who said that he used the language in which he thought his patients were most proficient. Similar behavior was observed by Herman (1961) who reported that in the absence of external pressures to use Hebrew, immigrants to Israel most often used the language in which they were most proficient, namely, the "mother" tongue.

One construct pertaining to the socio-cultural context of speech events which has been employed in the study of this problem is that of social domain (Fishman, 1964; Fishman, 1965; Reiman, 1965; Fishman, 1966). According to Fishman, social domains identify the major spheres of activity in a culture, e.g., familial, religious, educational, and are defined by the co-occurrence of a cluster of congruent role relationships, topics, and locales of communication. For example, in the U.S. the domain of education would be composed of interactions among occupants of specific statuses, e.g., teacher-student, student-student; during specified hours, e.g., school hours; and in specified locales, e.g., class room, principal's office.

Using this concept, Fishman has distinguished between stable bilingual situations which are characterized by language maintenance and unstable ones which are characterized by language shift. Under conditions of stable bilingualism, the "mother" and "other" tongues are reserved for different domains of life in the community, the former typically being used in the domains of family and friendship and the latter being used in domains such as education and employment. Under conditions of unstable intra-group bilingualism, on the other hand, domain separation in language use vanishes as the "mother" tongue becomes displaced by the "other" tongue in the family and friendship domains. In general, unstable intra-group bilingualism has occurred in cases of immigrant languages in the context of rapid industrialization, urbanization, or other rapid social change, as for example, in the cases of Yiddish, Ukrainian, Hungarian and German in the United States (Fishman, 1966).

Examples of more stable intra-group bilingual situations, or diglossia (Ferguson, 1959), have been described by Barker (1948), Fishman (1965), and Rubin (1962).

Recent studies (Padilla, 1955; Senior, 1965; Hoffman, 1968) have suggested the possibility that in contrast to most immigrant languages in the United States, Spanish in the Puerto Rican community of New York is being maintained in a relatively stable manner. One factor that has been cited in favor of such a possibility is that unlike most of the former immigrant groups in the U.S., Puerto Ricans in New York continue to maintain close physical contact with their homeland.

In the present investigation language use was studied among bilingual Puerto Ricans in an urban community near New York City. Data was gathered pertaining to each of five hypothesized domains of social interaction, namely, family, neighborhood, religion, education, and work. Data was also gathered pertaining to the linguistic abilities of interlocutors. It was hypothesized that if Spanish were preferred over English in at least some domains, especially that of the home, evidence for language maintenance would be provided. On the other hand, if it were found that English is preferred in all domains of life, the hypothesis of language shift would be supported.

Method

Procedure

Language use. The data on language use was collected by means of individual interviews in which respondents were asked to rate what proportion of their talk at school, at work, in the neighborhood, at church and at home was in Spanish, when speaking to other Puerto Ricans who knew both languages. For example, respondents were asked to rate the degree to which they used Spanish with parents, grandparents, aunts and uncles and other older relatives, or with brothers and sisters and other relatives of the same age, or with children and grandchildren and other younger relatives at home. In all domains but that of education, Ss were asked to rate their usage with interlocutors who were younger, older and of the same age as themselves. Age of interlocutor was not asked in connection with usage in the education domain since only the young Ss were attending school.

Ratings were made on an 11-point scale, with speaking only in Spanish at one extreme (10) and speaking only in English at the other (0).

The Spanish Usage rating (SUR) questions were asked during the course of an interview in which a number of other instruments were also administered. The interviews were held in the respondent's home or in a field office in his neighborhood and lasted from between two to four hours. The interviewers were bilingual and the language of the interview was the language or combination of languages that seemed to be most acceptable to the respondent.

Linguistic variables. A phonetic analysis of representative portions of the respondent's speech as recorded during the interview was completed by Ma and Herasimchuk (1968). As a byproduct of their work, they developed two measures of linguistic proficiency on which they rated all respondents. One of these measures is referred to as the Spanish-English Accent Scale (SEA) and the other, as the English Repertoire Range (ERR) scale. In the first of these measures, the respondents were rated in terms of the degree to which the phonological and syntactic structures of one language appeared to influence speech produced in the other. A 7-point scale was used, on which high scores indicated Spanish influence on English speech, low scores indicated English influence on Spanish speech and scores in between indicated no influence of either language on speech produced in the other. In the second measure, respondents were rated in terms of the number of English speech styles which they appeared to use and the fluency with which these were employed. A 6-point scale was used ranging from knowledge of only a few words and phrases at one extreme, to the ability to employ both careful and casual speech styles, in a maximally proficient manner, at the other.

Scores on these "linguistic scales" were obtained for each speaker who responded to the SUR questions.

Demographic variables. Information on certain demographic variables was obtained from a language census of the community which was conducted by Fishman (1968) a few weeks before the interviews on which the current study is based were given. The demographic variables studied in relation to language use were: sex, age, birthplace, occupation, education and years in U.S.

Subjects

The Ss who participated in the study were residents of a four-block area in the "downtown" section of Jersey City, New Jersey. Living in this area were 431 persons of Puerto Rican background. Of those 13 or older, who constituted 50% of the population, 48 participated in the interviews in which our data were obtained. Of the latter Ss, 38 were asked the SUR questions.

For purposes of data analysis, the Ss were divided into three subgroups: 1) the 9 Ss who were attending school and who thus responded to the school items; 2) the 21 Ss who were working[3] and who were therefore able to answer the work items; and 3) the 9 remaining Ss who neither worked nor went to school and so were not asked questions about language usage in these domains. All Ss responded to questions about usage at home and in the neighborhood and almost all of them responded to questions about usage in church.

The Ss who responded to educational items were younger than those in the other two groups, as the School group included Ss who ranged in age from 13 - 19, while the other groups included Ss who ranged in age from 19 - 65. For the most part, those in the School group were also born in the United States or arrived here by the average age of 3, while most of those in the two older groups were born in Puerto Rico. These older Ss arrived in the United States at a mean age of 30. Furthermore, the three groups were also found to differ in scores obtained on the Spanish-English Accent scale, $F(2,36) = 13.6$ ($p < .01$) as well as on the English Repertoire Range scale, $F(2,36) = 3.86$ ($p < .05$). These differences indicated that the younger or School group was more proficient in English than either of the two older groups.

Data Analysis

For each S, mean Spanish usage ratings were computed for each domain, and the resulting domain scores were correlated with the linguistic and demographic variables which have been described. In addition, the domain scores were subjected to three analysis of variance, one for each subgroup. In each domain, three additional scores were computed for each S, namely, his mean usage ratings for interlocutors who were older, the same age, and younger than himself.

The interlocutor scores, when totalled across for the domains of family, neighborhood, and religion, were also subjected to analysis of variance.

Results

Table 1 shows the correlations of the six demographic and two linguistic variables with the Spanish usage ratings in each of five

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Insert Table 1 about here

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domains. Of the demographic variables age and birthplace correlated positively and occupation negatively with Spanish Usage Ratings in religion and neighborhood. Thus, the respondents who said they used more Spanish in these domains were older, more often born in Puerto Rico, and of a lower occupational status than those who said they used less Spanish.

None of the demographic variables correlated significantly with Spanish Usage Ratings for family, employment or education. Noteworthy, however, is the fact that the correlations of the demographic variables with ratings for family were consistently similar in directions to the correlations of these variables with ratings for religion and neighborhood.

The Spanish-English Accent scale scores correlated positively with ratings of Spanish usage in three of the five domains, namely, family, neighborhood and religion. These correlations were of the order $r = .60$. Furthermore, negative correlations were found between ratings of amount of Spanish use in these domains and position on the ERR scale ($r = -.37$ to $r = -.45$). Thus, the less Spanish-accented

S's English and the more styles he commanded with fluency in English, the less likely he was to claim Spanish in the domains of family, neighborhood and religion.

The absence of significant correlations between the rating of Spanish usage in the work and educational domains and any of the linguistic and demographic variables is probably due to the fact that the Ss who responded to questions for these domains were restricted in range of age (since those who responded to education were below 19 years of age, while those who responded to work were above this age). In addition, the number of Ss included in these domains was relatively small, i.e., N = 9 in education and N = 21 in work. In the remaining domains, on the other hand, responses were obtained from almost all of the Ss.

Table 2 shows the mean ratings in the five domains which were obtained for each of the three subgroups, namely, the School group, the Work group and the No School-No Work group (others).

Insert Table 2 about here

Whereas for the School group significant differences between domains were obtained in ratings of Spanish usage, F(3,17) = 3.23 ($p < .05$), no such differences between domains were found for the remaining groups. Using t tests, it was found that the School group reported that they used significantly less Spanish in the domain of education than in the family or neighborhood domains. The remaining intra-group differences in reported usage were not found to be significant.

When similar comparisons were made, with age of interlocutor controlled, somewhat different results were found. Table 3 shows for each of the three subgroups the mean Spanish ratings obtained for Older, Younger and Same age interlocutors in each of the five domains. It was reported by all three groups that they used more Spanish with older people than with younger people. The School group reported that it used least Spanish with people of the same age, next-to-least with younger and most Spanish with older people. The two older groups reported that they used most Spanish with older people, next-to-most with people of the same age and least with younger people. Similar trends were found in all domains for which data were obtained.

Insert Table 3 about here

Of particular importance is the finding that in talking to people of the same age, the School group reported that they used mostly English in all domains including family. Thus, when age of listener was controlled, no substantial differences in amount of Spanish used were noted between domains.

The interlocutor scores, when combined across the domains of family, religion, neighborhood (See Table 4) were subjected to analysis of variance, which as Table 5 shows yielded a significant between group effect, $F(2,36) = 9.26$ ($p < .01$), a significant Age of Interlocutor effect, $F(2,36) = 30.6$ ($p < .01$), and a significant Group X Age of Interlocutor interaction, $F(4,72) = 9.2$ ($p < .01$). The results indicate that less Spanish was used by the School group than by the two older groups, more Spanish was used with older than with younger interlocutors, and the difference in amount of Spanish used by the School group in talking to older and same age interlocutors was larger than the corresponding differences in amount of Spanish used by the two non-school groups in talking to these types of interlocutors.

Insert Tables 4 and 5 about here

Discussion

Since in talking to other bilinguals, younger members of the community both used and received less Spanish than older people, and since younger people were also relatively more proficient in English than older people, it would seem that the linguistic proficiency of the speaker and interlocutor each played a role in determining language use in this community. Specifically, speakers who were dominant in English used it more often than those who were more proficient in Spanish. Similarly, interlocutors who were dominant in English tended to receive it more often than those who were dominant in Spanish.

The fact that the School group showed a slight tendency to use more Spanish with younger people, i.e., people below age 13, than with people of the same age, i.e., between the ages 13 - 19, would seem to be in accord with these trends, since it is likely that children below 13 years of age are less proficient in English than those between the ages of 13 - 19. This possibility seems likely, since Spanish is the first language learned by these youngsters.

No evidence for the independent influence of socio-cultural context upon language use was found inasmuch as no differences in ratings of Spanish usage appeared between domains when differences in age of interlocutor were controlled. Such a conclusion received support from a recent study by Fishman and Greenfield (1968), who found that a group of bilingual Puerto Rican teenagers in New York reported that although they would use more Spanish with parents, than with friends, priests, teachers, and employers, they also reported that they would use the same amount of Spanish with each of these people regardless of differences in the topic or place in which the conversation occurred. The differences obtained between these interlocutors was probably due to the fact that parents were less proficient in English than the others. Thus, when language use is studied in relation to difference in the socio-cultural context in which communication takes place, it must also be studied in relation to individual differences in linguistic ability. If the former is more significantly related to language use then diglossia may be said to obtain. If the latter is the major determinant of usage then language shift may be said to be taking place.

The finding that young people in speaking among themselves use English more often than Spanish in all domains including family suggests that bilingualism in the community under study is characterized by language shift. Moreover, the finding that these youngsters use Spanish primarily in talking to older members of the community suggests that it is used by these Ss principally as a tool for communicating with people who are less proficient in English than themselves. Furthermore, the fact that the two non-school groups, who speak primarily in Spanish, used somewhat more English with younger than with older people would seem to exclude the possibility that the use of English among the young is merely a form of teenage deviation from adult standards and suggests instead that it is accepted among adults as well. Therefore, it might be expected that as proficiency in English increases among the members of the community, less Spanish will be used in all domains of life including family. Thus, with respect to the phenomenon of language maintenance, the Puerto Ricans in the community studied would seem to be headed in the same direction as previous immigrant groups in the United States, as they appear to be undergoing displacement of the "mother" tongue by English in all domains of life.

Footnotes

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2. The authors wish to thank Dr. Joshua A. Fishman for his advice and encouragement during all stages of the work reported here.
3. One S worked and attended school and was therefore included in both School and Work groups.

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Table 1

PEARSON-PRODUCT MOMENT CORRELATIONS (r) OBTAINED BETWEEN 5 DOMAIN SCORES IN SUR AND VARIOUS DEMOGRAPHIC AND LINGUISTIC VARIABLES

	Domain				
Variable	Family	Neighborhood	Religion	Education	Work
Sex	.00	-.02	-.25	-.29	-.14
Age	.32	.52**	.43*	.52	-.05
Birthplace	.29	.50**	.55**	-.50	.21
Occupation	-.30	-.35*	-.39*	.00	-.18
Education	-.20	-.13	-.23	-.51	.03
No. years in U.S.	-.30	-.31	-.29	.38	-.37
Spanish-English Accentedness Scale	.59**	.61**	.61**	.03	.12
English Repertoire Range Scale	-.37*	-.39*	-.45**	-.19	-.16

* $p < .05$
** $p < .01$

Table 2

SPANISH USAGE RATINGS BY GROUP AND DOMAIN

Group	Domain				
	Family	Neighborhood	Religion	Education	Work
School	5.2	5.3	4.4	3.0	NR
Work	8.2	7.8	7.2	NR	7.7
Others	6.9	8.5	6.8	NR	NR

NR = No response

Table 3

SPANISH USAGE RATINGS BY DOMAIN, AGE OF INTERLOCUTOR AND GROUP

		Domain				
Groups	Age of I	Family	Neighborhood	Religion	Education	Work
	O	6.8	8.1	7.3	NR	NR
School	S	3.5	2.6	3.3	3.0	NR
	Y	5.7	4.9	4.3	NR	NR
	O	8.7	8.8	9.9	NR	8.6
Work	S	8.1	7.9	9.2	NR	7.8
	Y	7.4	7.2	6.4	NR	7.1
	O	8.1	9.6	8.2	NR	NR
Others	S	7.4	8.2	8.0	NR	NR
	Y	5.1	7.7	6.8	NR	NR

NR = No response

Table 4

SPANISH USAGE RATINGS BY GROUP AND AGE OF INTERLOCUTOR*

Group	Age of Interlocutor			
	Older	Same	Younger	Total
School (n=9)	7.4	2.8	4.9	5.0
Work (n=21)	9.0	8.3	6.9	8.1
Others (n=9)	8.6	7.7	6.6	7.7
Total	8.5	6.9	6.4	7.3

*Based on scores in Family, Neighborhood and Religion

Table 5

ANOV OF SUR SCORES BY GROUP AND AGE OF INTERLOCUTOR

Source	Sums of Squares	df	MS	F
Between Groups	52,226	38		
(A) Groups	17,733	2	8,866.5	9.26**
Ss w Groups	34,493	36	95.8	
Within Groups	27,860	78		
(B) Age of Interlocutor	9,973	2	4,986.5	30.6**
A x B	6,134	4	1,533.2	9.2**
B x Ss w Groups	11,753	72	163.2	
Total	80,086	116		

**$p < .01$

Chapter
IV-2-a

Abstract

Two Contextualized Measures of Degree of Bilingualism

Robert L. Cooper

Word naming and word association tasks were devised for the measurement of degree of bilingualism within each of five institutional domains: family, neighborhood, religion, education, and work. The techniques were administered to Puerto Rican Spanish-English bilinguals living in the same urban neighborhood near New York. Spanish dominance on the word naming subtests (N=38) was significantly related to the criterion measures whereas performance on the word association tests (N=29) generally was not. Relative proficiency in two languages, as measured by word naming, varied significantly as a function of context. It also varied significantly with age and recency of arrival. In the neighborhood studied, religion and the family appeared to be the domains most resistant to the erosion of Spanish.

TWO CONTEXTUALIZED MEASURES OF DEGREE OF BILINGUALISM[1]

Robert L. Cooper[2]

Yeshiva University

Traditional measures of degree of bilingualism typically yield a single difference score, computed by subtracting a score obtained in one language from a score obtained in another. A respondent whose performance or score is the same in each language is said to be a "balanced" bilingual, i.e., he is said to be equally skilled in two languages with respect to that aspect of linguistic performance required by the task (Macnamara, 1967a). Lambert (1955), for example, has compared the speed with which bilinguals can respond to directions given in each language, and Johnson (1953) and Macnamara (1967b) have contrasted the number of different words in each language produced within equal time limits.

The use of the resulting difference scores to express degree of bilingualism may be insufficiently revealing of relative proficiency inasmuch as bilingual speakers may use each language under socially differentiated circumstances (Fishman, 1965, 1968b). Thus, for example, language A may be used more often than language B at home but less often than B at school or at work (Ferguson, 1959; Rubin, 1962). The techniques for the measurement of degree of bilingualism which are described in this paper can be distinguished from the traditional ones in being differentiated with respect to such societal domains or contexts. The present techniques were designed to yield a set of scores in order to reveal those differences in bilingual proficiency which might be associated with the differential societal usage of two languages. Some evidence for the validity of such scores as well as the description they give of a specific bilingual community are presented in this report.

Method

Two techniques, word naming and word association, were adapted for use with Puerto Rican bilinguals living in Greater New York. The techniques yielded Spanish and English scores corresponding to five hypothesized societal domains. These were family, neighborhood, religion, education, and work.

Techniques

On the word naming task, Ss were asked to name, in one minute, as many different words referring to a specified context as they could. This was done in each language for each domain. For family, they were asked to name things seen or found in a kitchen; for neighborhood, things seen or found in a neighborhood; for religion, things seen or found in a church; for education, subjects taught in schools; and for work, jobs, occupations, or professions. Responses were elicited for all five domains in one language followed by all five domains in the other language. The language in which responses were first given was randomly chosen for each S. The order of domains was kept the same for all Ss, this being family, neighborhood, religion, education, and work. Directions were of the order: "Tell me as many English (Spanish) words as you can that name things you can see or find in a kitchen--your kitchen or any other kitchen. Words like salt (sal), spoon (cuchara), rice (arroz)." Two practice runs were given, one in English, before the five domains were presented in

English, and one in Spanish, before the domains were presented in Spanish. In the trial runs, Ss were asked to name as many different words as possible without restriction as to referent.

On the word association task, Ss were asked to give, within one-minute periods, as many continuous associations as possible to the following English and Spanish stimulus words: factory, school, church, street, home, factoría, escuela, iglesia, calle, and casa. Responses were restricted to the language of the stimulus word. Directions were of the order: "Tell me as many English (Spanish) words as come to mind when you hear the word home (casa)." Before the presentation of the first domain stimulus word, Ss were asked to respond to a series of practice stimuli until it was clear that they understood the task. The order in which the domains were presented was work, education, religion, neighborhood, and family. The order in which the language of response was elicited from each S was always opposite to that followe on the word naming task.

Both tasks were individually administered along with a number of other instruments during a tape-recorded interview. The interviews, which lasted between two and four hours, were conducted in the respondent's home or in a field office in his neighborhood. More than one session was sometimes required to complete the interview. The word naming task always preceded the word association task. Between the administration of the two, a ten-minute interval elapsed, during which time Ss were asked to read some Spanish and English materials. Interviewers were bilingual in Spanish and in English and gave instructions in whichever language or combination of languages that was preferred by the respondent.

Subjects

The tasks were administered as part of an intensive study of Spanish-English bilingualism within a four-block Puerto Rican area of the "downtown" section of Jersey City (Fishman, Cooper, Ma, *et al.*, 1968). Living there were 431 persons of Puerto Rican background who comprised 90 households. Half of this group consisted of children under the age of 13. Of those who were 13 or older, over one-fifth (*N*=48) voluntarily participated in interviews of which the reported tasks formed a part. An attempt was made to obtain both male and female respondents who would represent the range of ages (of those 13 or older) and the range of occupational and educational backgrounds to be found in that community. Not all respondents completed all portions of the interview. The word naming task was administered to 38 *S*s and the word association task to 29 *S*s. All those who took the word association task also took the word naming task.

Scoring

The taped responses were orthographically transcribed and the number of each *S*'s different responses for each domain-language combination was counted for each task. Thus, *S*s who completed all subtests received 10 scores on each of the two tasks.

Criterion Variables

Performance on the word naming and word association tasks was studied in relation to six criterion variables. These are described below. The first two were obtained from a language census of the community (Fishman, 1968a). The census variables were demographic characteristics that were expected to be positively related to degree of exposure to English. The third and fourth variables were global ratings of linguistic performance. The ratings were made by the linguists who had performed a phonetic analysis of representative portions of each respondent's speech, recorded during the extended interview (Ma and Herasimchuk, 1968). The fifth and sixth variables were listening comprehension scores obtained from a technique employing tape-recorded, naturalistic conversations between bilingual Puerto Ricans in New York (Cooper, Fowles, and Givner, 1968).

The six criterion variables were as follows:

1. Number of years on the mainland. Recency of arrival was rated on a 7-point scale with "less than one year" at one extreme and "U.S. born" at the other.

2. Occupation. Occupational status was rated on a 4-point scale ranging from "operative, service worker, laborer, or usually unemployed" to "professional, manager, or college student." Housewives and students enrolled in grades below the college level were not rated.

3. Accentedness. Respondents were rated in terms of the degree to which the phonological and syntactic structures of one language appeared to influence speech produced in the other. A 7-point scale was used on which high scores indicated Spanish influence upon English speech, low scores indicated English influence upon Spanish speech, and scores in between indicated maximum language distance, or no influence by either language upon speech produced in the other.

4. English repertoire range. Based on the notion of verbal repertoire (Gumperz, 1964), respondents were globally rated in terms

of the number of English speech styles which they appeared to use and the fluency with which these were employed. A six-point scale was used, ranging from knowledge of only a few words and phrases, at one extreme, to the ability to employ both careful and casual speech styles, in a maximally fluent manner, at the other.

5. Listening comprehension (English). Subjects were assessed with respect to their ability to understand a taped conversation among four Puerto Rican college students who were engaged in a "bull session" about the political status of Puerto Rico. This conversation was almost entirely in rapid, excited English.

6. Listening comprehension (Spanish and English). Subjects were assessed with respect to their ability to understand a taped conversation between a parish priest and a parishioner who had come to the rectory to ask for a letter of recommendation. Each speaker used both English and Spanish. For each respondent, the percentage of correct responses to items testing comprehension of the English portions of the conversation was subtracted from the percentage of correct responses to items testing comprehension of the Spanish portions. Thus, positive difference scores indicated that the respondent understood more of the Spanish portions than of the English portions and negative difference scores indicated the reverse.

Data Analysis

Each S's English domain scores were subtracted from the corresponding Spanish domain scores on the word naming and word association tasks. Intercorrelations were obtained between the resulting 10 difference scores and the criterion scores. Since positive difference scores represented greater fluency in Spanish than in English, evidence for the validity of the techniques would be obtained if positive correlations were observed between the difference scores and those criterion variables on which high (or positive) scores reflected greater relative proficiency in Spanish (the Spanishness scale and the listening comprehension difference score). Similarly, evidence for the validity of the techniques would be obtained if negative correlations were observed between the difference scores and those criterion variables reflecting proficiency in English (the English repertoire range scale and the English listening comprehension score) and between the difference scores and the two demographic variables which reflected degree of exposure to English. As a complement to the correlation analysis, an analysis of variance was performed for the ten word naming scores, and one was performed for the 10 word association scores as well. For the analyses of variance, Ss were classified in terms of six demographic subgroups based on the intersection of three age groups (13-18, 19-34, and 35 and above) with two groups differing in length of residence on the mainland (less than 11 years, more than 11 years). Support for the validity of the techniques would be found if these subgroups displayed different degrees of bilingualism and if these differences varied by domain.

Results

Table 1 presents the correlations obtained between the criterion variables and the word naming and word association difference scores. In general, the word naming difference scores were significantly correlated with the criterion variables, and in the expected direction, whereas the word association difference scores were not. Whereas 21 of 30 coefficients were statistically significant for the word naming difference scores, only 6 of the 30 word association coefficients reached statistical significance. Word naming coefficients ranged from .17 to .70 with the median coefficient at .44. Highest word naming coefficients were obtained with the occupational status scale. The fewest significant word naming coefficients were obtained with the two listening comprehension scores. Performance on each listening comprehension test was predicted by a different set of word naming difference scores. The education and religion difference scores were significantly correlated with the scores which measured comprehension of the college students' conversations in English ($p < .01$ and $< .05$, respectively), whereas the family and neighborhood difference scores were significantly correlated with the scores which measured comprehension of the Spanish and English conversation in a parish rectory ($p < .01$). Of the word naming difference scores, the home and education scores yielded statistically significant correlations with the greatest number of criterion variables (5 of 6), and the work scores yielded significant correlations with the fewest.

Insert Table 1 about here

Intercorrelations between the word naming and word association difference scores are presented in Table 2. For the intercorrelations of word naming difference scores with each other, coefficients ranged from .26 to .63 with a median of .56. The range for the correlations of word association difference scores with each other was from .07 to .45 with a median of .29.

Insert Table 2 about here

The analysis of variance of the English and Spanish word naming scores is presented in Table 3. No difference was observed between the total number of English and Spanish words (all domains combined) given by the respondents as a total group. However, a significant interaction was observed between language and domain, indicating that there were significant differences between average English and Spanish scores for some domains. To describe the performance of the group as a whole would be misleading, however, inasmuch as significant subgroup differences were observed. There was, for example, a significant interaction between language and length of residence in the U.S. T tests indicated that those respondents with the shorter residency had a higher average total score in Spanish than in English ($p < .01$) whereas there was no significant difference between the average total language scores for those respondents with the longer residency. More importantly a significant four-way interaction was obtained. This indicated that the six subgroups varied with respect to the relationships between English and Spanish average scores as observed over the five domains. That is to say, relative proficiency varied as a function of domain, and the pattern of this variation, the dominance configuration (Fishman, 1965), varied from subgroup to subgroup. Note, however, that there was no significant interaction between language, age, and recency of arrival. Thus, the six subgroups cannot be said to differ with respect to their relative proficiency in terms of total English and Spanish scores. However, they can be said to differ with respect to the pattern of language dominance as exhibited by domain.

Insert Table 3 about here

The pattern of dominance as it varied from subgroup to subgroup can be seen in Table 4, which presents the average English and Spanish word naming scores for each of the six subgroups. For example, subgroup II, which consisted of school age respondents who had received their formal education via the medium of English, showed a significantly higher education score in English than in Spanish ($p < .01$), whereas subgroup I, which consisted of school age respondents who had received their education via both languages, showed no significant difference between their average language scores for that domain. In the word naming task there was one domain for which more than two subgroups exhibited a significant difference between English and Spanish means. This was the domain of family, for which three of the four significant differences favored Spanish. Of the three domains for which two subgroups exhibited significant differences between language means, in only one did both differences favor the same language. This was the domain of religion, for which Spanish again was favored.

Insert Table 4 about here

Unlike the analysis of variance of word naming scores, the analysis of variance of the word association scores yielded no significant differences between subgroups. Like the former, however, the latter yielded a significant interaction between language and domain ($p < .01$) while showing a nonsignificant main effect for language.

Discussion

The word naming difference scores' significant correlations with the criteria and the ability of the word naming subtests to distinguish varying patterns and levels of performance of demographic subgroups suggest that word naming represents a promising technique for the contextualized description of degree of bilingualism. The moderate correlations among the word naming subtests, the subtest difference scores' differentially successful prediction of contextually and linguistically differing listening comprehension passages, and the coherent pattern of between-domain language differences, as seen in the performance of the different subgroups, suggest that the word naming subtests did tap somewhat different contextual skills.

The continuous word association subtests, on the other hand, were not successful inasmuch as they neither predicted the criterion variables very well nor did they distinguish among demographic subgroups that one would expect to be different with respect to degree of bilingualism, whether globally or contextually defined. The reason for the failure of these subtests is by no means clear, although it may be hypothesized that the task, in being relatively less focussed than the word naming task, resulted in a lower level of performance, which reduced the opportunity for reliable differences to emerge. Indeed, there were fewer total words produced in response to the word association task than in response to the word naming task.

The between-group differences in dominance configurations, obtained by means of the contextualized word naming tasks, supports the contention by Fishman (1968b) that global measures of degree of bilingualism may provide inadequate descriptions of bilingual performance. For example, the performance of the six demographic subgroups on the word naming task would have been described as "balanced" in terms of the differences between their English and Spanish average total scores (inasmuch as a nonsignificant main effect for language was observed and the triple interaction between language, age, and recency of arrival was also nonsignificant). Yet all but one of these groups exhibited significant differences between English and Spanish average scores in one or more domains. The use of such contextualized measures may be useful not only in describing the relative proficiency of bilinguals as realized in varying contexts but also in describing the direction of generational shift in these abilities where the tasks are administered to subgroups differing in age or in the opportunity to learn both languages. Thus, the word naming scores suggest that in the community studied, the tradition-oriented domains of home and religion are the most resistant to the erosion of Spanish, or stated positively, that these domains are, as predicted by Fishman (1966), the ones in which the use of Spanish is most likely to be maintained.

Footnotes

[1] The research reported in this paper was supported by a grant from the U.S. Office of Education, Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals." Data analysis was made possible by a grant from the College Entrance Examination Board.

[2] The author wishes to thank Dr. Joshua A. Fishman for his advice and encouragement during all stages of the work reported here and Mr. Lawrence Greenfield for his comments on an earlier draft of this paper.

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Table 1

Correlations between Difference Scores and Criterion Variables

Difference Score	Variable Yrs. in U.S.	 Occupation	 Eng. R.R.	 Listen. Comp. (Eng.)	 Listen. Comp. (Span.-Eng.)	 Accentedness
Word Naming						
Family	-.57**	-.52*	-.54**	-.33	.47**	.53**
Neighborhood	-.34*	-.26	-.45**	-.23	.48**	.50**
Religion	-.41*	-.63**	-.23	-.39*	.15	.42**
Education	-.41*	-.70**	-.52**	-.63**	.31	.57**
Work	-.17	-.45*	-.34*	-.33	.14	.49**
Word Association						
Family	-.31	.00	-.29	-.48*	.36	.20
Neighborhood	-.19	-.56**	-.52**	-.35	.47*	.25
Religion	.10	-.59*	-.44*	.11	.32	.30
Education	.17	-.24	-.33	-.28	.28	.09
Work	-.05	-.05	-.30	-.14	.11	.32

Note:--The fifth and sixth variables are scales on which high scores represent relatively greater proficiency in Spanish, low scores relatively greater proficiency in English, and intermediate scores "balance".

$^{*}p < .05$

$^{**}p < .01$

Table 2

Intercorrelations between Word Naming and Word Association Difference Scores

Variable	1	2	3	4	5	6	7	8	9	10
1. WN-Family	---	.61	.57	.63	.42	.23	.49	.46	.19	.09
2. WN-Neighborhood		---	.43	.51	.26	.29	.42	.32	.26	.41
3. WN-Religion			---	.62	.55	.34	.42	.20	.26	.19
4. WN-Education				---	.59	.40	.53	.20	.54	.42
5. WN-Work					---	.10	.50	.43	.36	.42
6. WA-Family						---	.40	.07	.45	.31
7. WA-Neighborhood							---	.43	.27	.18
8. WA-Religion								---	.20	.15
9. WA-Education									---	.43
10. WA-Work										---

Table 3

Analysis of Variance of Word Naming Scores

Source	df	ms	F
Between subjects	37		
Age (C)	2	245.53	1.33
Years in U.S. (D)	1	530.02	2.88
CD	2	366.49	1.99
Error (b)	32	183.85	
Within subjects	316		
Domain (A)	4	999.71	92.74**
Language (B)	1	18.08	.50
AB	4	14.92	2.55*
AC	8	19.38	1.80
AD	4	6.68	.62
BC	2	25.95	.72
BD	1	349.98	9.65**
ABC	8	11.99	2.05*
ABD	4	21.65	3.71**
ACD	8	24.78	2.30*
BCD	2	80.67	2.23
ABCD	8	15.17	2.60*
Error (w)	262		
Error_1 (w)	117	10.78	
Error_2 (w)	29	36.25	
Error_3 (w)	116	5.84	
Total	353		

$*p < .05$

$**p < .01$

Table 4

Mean Word Naming Scores of Six Demographic Subgroups

					Domain				
Subgroup	N	Age	Years in U.S.	Language	Family	Neighborhood	Religion	Education	Work
I	6	13-18	< 11	Eng	11.66**	11.83	6.50*	10.00	8.00
				Span	18.83	13.83	9.66	12.16	9.50
II	6	13-18	> 11	Eng	24.50**	21.00**	14.00	16.33**	15.16
				Span	20.16	16.50	12.83	8.16	12.83
III	7	19-34	< 11	Eng	15.71*	13.00	6.71**	8.14*	7.86
				Span	18.29	12.43	10.71	11.14	9.29
IV	7	19-34	> 11	Eng	16.57	12.86	11.00	8.00	8.14
				Span	16.43	10.57	9.00	6.86	8.29
V	4	35+	< 11	Eng	12.67**	5.33**	3.00	4.00	3.50
				Span	17.67	13.33	5.50	2.33	4.50
VI	8	35+	> 11	Eng	20.25	13.57	7.86	10.83	7.66**
				Span	18.75	13.29	9.86	11.33	12.33

*$p < .05$ for difference between means of English and Spanish domain scores (*t* test)

**$p < .01$ for difference between means of English and Spanish domain scores (*t* test)

Chapter
IV-2-b

THE CONTEXTUALIZATION OF SCHOOLCHILDREN'S BILINGUALISM[1]

Martin Edelman[2]

Yeshiva University

In recent years there has been increasing recognition of the need to view bilingualism not as a global capacity but as one which could be described in terms of various components (Fishman, 1965, 1968). This view has led to the consideration that bilingual proficiency might vary over a range of social settings. For example, a bilingual individual might be more proficient in one language when discussing matters of an academic nature and more proficient in another language when talking about household matters.

Drawing upon this assumption, Cooper (1968) and Greenfield and Cooper (1968) developed a series of instruments designed to measure degree of bilingualism in various domains or institutional contexts in which language behavior occurs, e.g., family, education, religion. In the work reported in the present paper, two contextualized measures of degree of bilingualism were adapted for use with children. One measure was designed to tap bilingual *proficiency* in each of several domains. The other was constructed to assess the relative *use* of two languages in different settings. The proficiency measure seeks to indicate what a bilingual individual *can* do. The use measure seeks to indicate what that individual typically *does* do.

Method

Subjects

The subjects tested were 34 children of Puerto Rican background who lived in the "downtown" area of Jersey City, an area in which Puerto Rican bilingualism has been intensively studied (Fishman, Cooper, Ma, et al., 1968). The children, whose ages ranged from 6 to 12 and who were evenly divided by sex, attended a parochial school within the neighborhood. All children had been born on the Mainland.

Procedure

The children were interviewed individually. Each interview was tape recorded. A modified version of a Spanish usage rating schedule developed by Cooper and Greenfield (1968) for use with adults was administered to each subject. The modified inventory consisted of a series of structured questions designed to assess the degree to which respondents used Spanish and English with various bilingual interlocutors in school, at church, in the neighborhood, and at home to represent usage in the domains of education, religion, neighborhood, and family, respectively. For example, students were asked to indicate the extent to which they used Spanish with other Puerto Rican bilingual children when playing outside in the street near their home. Following the administration of the Spanish usage rating scale the pupils were presented with a modified version of a word naming task developed by Cooper (1968) for use with adults. In the modified word naming task, subjects were asked to name, within 45-second periods, as many objects as could be found in each of four settings: kitchen, school, church, and neighborhood, to represent the domains of family, education, religion, and neighborhood, respectively. The children named objects for all four domains in one language and then named objects for all four domains in the other language. Half the children first named the objects in English and the other half first named them in Spanish.[3]

Scoring

Responses on the Spanish usage rating schedule were scored on a five-point scale, with the exclusive use of Spanish at one end of the scale and the exclusive use of English at the other. A rating for the use of Spanish across various interlocutors was computed for each subject for each setting or domain. For the word naming test the number of different words produced in each domain in each language was counted for each respondent.

Data Analysis

The childrens' responses on the word naming test and Spanish usage rating schedule were each subjected to an analysis of variance. For the purpose of these analyses, Ss were divided into four groups based on the intersection of age (6-8, 9-11) and sex.

Results

Spanish Usage Rating Scores

The analysis of variance for the Spanish usage rating schedule is summarized in Table 1. A significant main effect was observed for domain ($p < .01$). That is to say, children reported that on the average, they used more Spanish in some domains than in others.

Insert Table 1 about here

Table 2 shows the mean rating for the use of Spanish in each of the four domains. Most Spanish was reported for family and least for education. A Newman-Keuls test of the significance of the differences between the domain means indicated that the ratings for family and neighborhood were significantly higher than those for education and religion. There was no difference between the family and neighborhood ratings and no difference between the education and religion ratings.

Insert Table 2 about here

These findings are in general agreement with those of Greeenfield and Cooper (1968) who found that older children (ages 13-18) in that neighborhood used less Spanish in the domains of education and religion and more Spanish in the domains of neighborhood and family.

Word Naming Scores

The analysis of variance of the word naming scores is summarized in Table 3. Significant effects were observed for age, domain, language, and for the interaction of language with domain.

Insert Table 3 about here

The significant F for age indicates that word naming fluency (the number of words produced when both languages are combined) was related to the age of the respondents, the older children producing more words. This suggests a developmental trend of increasing proficiency (in terms of productivity).

The main effect for domain, on the other hand, indicates that when words given in both languages are combined, a greater number of words were produced in some domains than in others. The mean scores for each domain were subjected to a Newman-Keuls test of significance. The results showed overall language fluency for the domains of education, family and neighborhood to be the same and superior to that from the domain of religion. Thus, the first three contexts appear to be equally salient for children as stimuli for the production of speech, whereas the religious domain proved to be a less salient stimulus.

Insert Table 4 about here

The significant effect for language indicates that on the average more words were produced in one language than in the other when all domains are combined, with the greater number of words being produced in English. However, the significant language by domain interaction indicates that relative proficiency varied as a function of domain. This variation can be seen in Table 4, which presents the average number of words named in each language and domain. It can be observed that English was favored over Spanish for the domains of neighborhood, religion, and education. However, with respect to the domain of family, no difference between English and Spanish averages was observed.

Insert Table 5 about here

A ratio of language dominance was computed for the performance of each child in each domain. The formula used was

$\left(\frac{\text{Spanish - English}}{\text{Larger of the two}} + 1\right)\Big/2$. This formula yields a score which indicates the degree to which Spanish is dominant. Spanish dominance scores can range theoretically from 0 to 1, with a score of .50 indicating "balance."

The average language dominance ratios for the domains of religion, neighborhood, family and education were .42, .42, .50, and .37, respectively. Thus, the greatest Spanish dominance was observed for family and the least for education. These results correspond in general to those obtained from the Spanish usage rating scale (see Table 2). A difference between the two instruments, however, is found for the domain of neighborhood. In this domain children's self ratings indicated slightly more Spanish than English. However, their performance on the word naming test revealed the opposite tendency.

Summary

Two contextualized degree of bilingualism measures, one designed to assess relative proficiency in two languages, the other to assess the extent to which each is used, were administered to 34 bilingual children of Puerto Rican background who attended a parochial school in Jersey City. The children reported that they used more Spanish, when talking to other bilingual Puerto Ricans, in the contexts of family and neighborhood, than they did in those of education and religion. Their relative proficiency scores were in general agreement with their usage scores: the greatest difference between English and Spanish proficiency scores being observed for the domain of education and the smallest difference for the domain of family.[4]

Footnotes

[1] The research reported herein was supported under DHEW Contract No. OEC-1-7-062817-0297, The Measurement and Description of Widespread and Stable Bilingualism, Joshua A. Fishman, Project Director. Data analysis was made possible by a grant to the Project Director from the College Entrance Examination Board.

[2] The author is indebted to Sister Julia of St. Michael's School, Jersey City, and to Sister Patricia and Brother Patrick of Holy Name School, New York City, for their very kind and gracious assistance.

[3] Due to a procedural error, the original scores of six subjects were lost, and these children had to be retested. Mean score comparisons on the Spanish usage rating scale and the word naming task between the second scores of this group and the original scores of the other children of the same age and sex showed no differences. The second set of scores of the six retested children were retained for the analyses that followed.

[4] These results were approximated by Gerard Hoffman with a group of 32 Puerto Rican children, aged 6-13, randomly selected from a parochial school in New York City. Hoffman used the same modified versions of the word naming task and the Spanish usage rating scale, with the following modification. The presentation of domain-related stimuli were randomized to eliminate the possibility of bias from a fixed order of presentation. Both analyses of variance yielded the same significant main effects and interactions as in the original study (except for the triple interactions,

inasmuch as Hoffman substituted a socioeconomic status rating for sex as one of the between-group variables). Hoffman's Ss gave significantly more English than Spanish words in each domain, with the smallest difference being observed for the domain of family. The Spanish usage means of the two groups were quite similar, the same rank order being observed.

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Table 1

ANALYSIS OF VARIANCE OF SPANISH USAGE RATING SCORES

Source	df	ms	F
Between Subjects	33		
Age (B)	1	395.76	2.08
Sex (C)	1	152.46	.80
BC	1	147.17	.77
Error (b)	30	189.95	
Within Subjects	100		
Domain (A)	3	1242.54	15.98**
AB	3	20.00	.26
AC	3	176.55	2.27
ABC	3	297.85	3.83*
Error (w)	88	77.75	
Total	133		

$*p < .05$

$**p < .01$

Table 2

MEAN SPANISH USAGE RATING SCORE

Domain			
Education	Religion	Neighborhood	Family
2.08	2.30	3.15	3.30

Table 3

ANALYSIS OF VARIANCE OF WORD NAMING SCORES

Source	df	ms	F
Between subjects	33		
Age (C)	1	689.30	19.67**
Sex (D)	1	15.54	.44
CD	1	87.87	2.51
Error (b)	30	35.05	
Within subjects	235		
Domain (A)	3	64.18	9.30**
Language (B)	1	123.13	11.11**
AB	3	21.71	6.66**
AC	3	20.51	2.97*
AD	3	.96	.14
BC	1	16.50	1.49
BD	1	42.08	3.80
ABC	3	8.00	2.45
ABD	3	2.23	.68
ACD	3	4.51	.65
BCD	1	14.62	1.32
ABCD	3	2.66	.82
Error (w)	207		
$Error_1$ (w)	89	6.90	
$Error_2$ (w)	29	11.08	
$Error_3$ (w)	89	3.26	
Total	268		

$*p < .05$
$**p < .01$

Table 4

MEAN NUMBER OF WORDS NAMED BY LANGUAGE AND DOMAIN

	Domain			
Language	Education	Religion	Neighborhood	Family
English	10.5**	7.7**	9.6**	9.0
Spanish	7.8	6.5	8.0	9.0

**p $<$ .01 for difference between pairs of English and Spanish means

Chapter
IV-2-c

SEMANTIC INDEPENDENCE AND DEGREE OF BILINGUALISM IN TWO COMMUNITIES[1]

Tomi D. Berney and Robert L. Cooper

Psychologists interested in bilingual functioning have devised a number of relatively quick and inexpensive measures of degree of bilingualism such as the number of words named in each language within equal time periods (Johnson, 1953; Macnamara, 1967), the speed of response to directions given in each language (Lambert, 1955), and the speed with which pictures are named in each language (Ervin, 1961). The present report describes a measure of semantic independence which can be derived from verbal fluency measures of degree of bilingualism.

Method

Two bilingual fluency techniques, word naming and continuous word association, were administered to 38 and 31 respondents respectively as part of an intensive study of bilingualism conducted within a four-block Puerto Rican neighborhood in the "downtown" section of Jersey City (Fishman, Cooper, Ma, *et al*., 1968). Each of these techniques elicited a series of discrete words, in English and in Spanish separately, for each of five semantic contexts representing the institutional domains of family, neighborhood, religion, education, and work. These techniques were administered primarily to obtain an estimate of relative bilingual fluency in each domain, by comparing the number of words produced in each language. It was also possible, however, to subject the responses to another analysis in terms of the proportion of translation equivalent responses which were observed. This proportion could serve as an index of the degree of semantic independence exhibited in each domain by respondents in their two languages.

A Puerto Rican Spanish-English bilingual translated all Spanish responses into English. For any domain, a translation equivalent pair was counted for a respondent when an English response was identical to the English translation of one of his Spanish responses. The number of translation equivalent pairs in each domain was counted for each respondent and expressed as a ratio to the total number of words observed in the weaker language for that domain. For example, if for a given domain a respondent produced 20 words in Spanish and 15 words in English, and if 5 of his English responses had equivalent responses in Spanish, his translation equivalent ratio for that domain would be $5/15 = .33$.

To provide a contrast to the responses of the Jersey City group, the word naming and word association tasks were administered to 41 residents of Yauco, a small town a few miles away from Ponce, Puerto Rico. These responses were also analyzed in terms of translation equivalent ratios. The translation equivalent ratios of both groups were then compared via two analyses of variance, one for the word naming task and one for the word association task.

Results

Tables 1 and 2 summarize the analyses of variance of the word naming and word association translation equivalent ratios respectively. Each analysis showed significant main effects for group ($p < .05$) and for domain (word naming, $p < .01$; word association, $p < .05$), but no significant interaction between the two. That is to say, one group, the Yauco respondents, gave significantly larger translation equivalent ratios on the average than did the other, and some domains exhibited significantly greater average ratios than did others, but no difference was observed between the two groups' patterns of domain differences.

Insert Tables 1 and 2 about here

On the word naming task, when the responses of both groups were pooled, the domains with the smallest ratios of translation equivalent responses (or conversely the domains with the greatest semantic independence) were those of family and neighborhood, and the domains with the largest ratios were those of religion and education. A Newman-Keuls multiple range test of these word naming differences indicated that the differences between the ratios for religion and neighborhood, religion and family, and education and neighborhood were statistically significant ($p < .01$, .05, .05, respectively). On the word association task, only one difference between domains, with both groups' responses pooled, approached significance ($p < .06$) when assessed by the Newman-Keuls multiple range test, this being the difference between the domains of family and education, the former domain exhibiting the smallest ratio and the latter the largest. On both tasks the domains of family and neighborhood showed the two lowest translation equivalent ratios and the domain of education showed either the highest or the second highest. Thus, it might be argued that the least public domains, those upon which it is plausible that English is likely to impinge the least, were the ones which exhibited the greatest semantic independence. Table 3 presents the translation equivalent ratios of both groups for each domain on each task.

Insert Table 3 about here

With respect to the relationship between semantic independence and relative proficiency, it did not appear that the former was a function of the latter. When the difference between the average number of Spanish and English words produced by all respondents for a given domain was expressed as a ratio to the number of words produced in the weaker language, it was found that on both tasks the domains of family and religion exhibited the greatest ratios (Table 4). However, it can be seen that while the domain of religion exhibited the greatest translation equivalent ratio on the word naming task, the domain of family showed the second lowest. Similarly, on the word association task, the lowest translation equivalent ratio was observed for the domain of family, while the highest was observed for the domain of education. Thus, it is likely that semantic independence and relative proficiency are at least partially independent dimensions.

Insert Table 4 about here

The greater average total translation equivalent ratio obtained by the Yauco group can be explained not in terms of their greater Spanish dominance (since the difference between their proficiency ratios and those of the Jersey City respondents was much greater than the difference between the two sets of translation equivalent ratios) but rather in terms of the compound-coordinate distinction (Ervin and Osgood, 1954). The bilingualism of the Yauco group was more likely to have been school-based (and hence compound) than that of the Jersey City group. Thus, the finding of greater semantic interdependence in the former groups is not surprising. Such an interpretation is consistent with the finding of greater semantic independence in those domains, the family and the neighborhood, in which the compound use or compound acquisition of English and Spanish would be least likely.

Summary

The Spanish and English word naming and word association responses of two groups of Puerto Rican respondents, one living on the Island and the other on the mainland, were analyzed in terms of the proportions of translation equivalent pairs to the number of words produced in the weaker language for each of five domains. The respondents living on the Island gave significantly higher translation equivalent ratios than did those living on the mainland. The domains of family and neighborhood exhibited the smallest translation equivalent ratios and the domain of education either the second largest or the largest. It was concluded that semantic independence and relative proficiency are probably largely independent dimensions and that the former may reflect the coordinateness of the bilingual's language systems.

Footnotes

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Table 1

ANALYSIS OF VARIANCE OF WORD NAMING TRANSLATION EQUIVALENT RATIOS

Source	df	MS	F
Between subjects	78		
Group (B)	1	36.75	4.21*
Error (b)	77	8.73	
Within subjects	285		
Domain (A)	4	19.54	4.79**
A x B	4	7.53	1.85
Error (w)	277	4.08	
Total	359		

* $p < .05$
**$p < .01$

Table 2

ANALYSIS OF VARIANCE OF WORD ASSOCIATION TRANSLATION EQUIVALENT RATIOS

Source	df	MS	F
Between subjects	71		
Group (B)	1	34.60	4.02*
Error (b)	70	8.87	
Within subjects	270		
Domain (A)	4	10.12	2.44*
A x B	4	1.90	.46
Error (w)	262	4.14	
Total	341		

*$p < .05$

Table 3

MEAN TRANSLATION EQUIVALENT RATIOS[1] ON TWO BILINGUAL FLUENCY TASKS

Group	Domain					
	Family	Neighborhood	Religion	Education	Work	Total
			Word Naming			
Jersey City	.46	.41	.60	.51	.52	.50
Yauco, P.R.	.53	.53	.60	.65	.56	.57
Total	.50	.47	.60	.58	.54	.54
			Word Association			
Jersey City	.37	.45	.49	.49	.49	.46
Yauco, P.R.	.47	.54	.50	.55	.53	.52
Total	.42	.50	.50	.52	.51	.49

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[1] Ratio of translation equivalent pairs to the number of words produced in the weaker language.

Table 4

MEAN RELATIVE PROFICIENCY RATIOS[1] ON TWO BILINGUAL FLUENCY TASKS

Group	Domain					
	Family	Neighborhood	Religion	Education	Work	Total
			Word Naming			
Jersey City	.05	-.03	.12	-.07	.11	.04
Yauco, P.R.	.48	.24	.38	.27	.26	.33
Total	.27	.11	.24	.10	.19	.19
			Word Association			
Jersey City	.14	-.11	.14	.00	-.04	.03
Yauco, P.R.	.32	.23	.44	.13	.31	.29
Total	.24	.09	.30	.08	.16	.18

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[1] The number of Spanish words minus the number of English words divided by the larger number of words.

Chapter
IV-3-a

BILINGUAL NEED AFFILIATION AND FUTURE ORIENTATION IN EXTRA-GROUP AND INTRA-GROUP DOMAINS

J. Findling[1]

The purpose of the work here reported was to determine whether need affiliation and future orientation are differentially reflected in the languages of Spanish-English bilinguals and whether such differences, if found, are explainable in terms of domain characteristics. Two experiments were conducted to answer these questions, one having to do with need affiliation and the other with future orientation.

Central to both of these experiments is the construct of domain. Domains are defined as institutionalized spheres of activity in which language behavior occurs (i.e., family, education, religion, etc.). Each domain is extrapolated from and denotative of more concrete situations, the common attributes of which make them conceptually congruent and socially distinguishable from other spheres of activity (Fishman, 1968).

Domains may be characterized in terms of different dimensions, one of which is the intra-group to extra-group continuum. Intra-group domains are institutionalized spheres of activity over which speech-community members have relatively greater control than speech-community outsiders. In contrast, extra-group domains may be defined as institutionalized spheres of activity over which speech-community outsiders enjoy relatively greater control than speech-community members. Between these extremes there may also be intermediate domains over which control is mixed. In such domains the proportion of control positions

(positions of authority or power) occupied by speech-community members is approximately equal to the proportion of control positions occupied by speech-community outsiders.

Underlying the future orientation experiment was the notion that, from the point of view of speech-community members, intra-group domains are less ambiguous and more closely representative of the traditional ways of life of a given speech community than extra-group domains. The need affiliation experiment was based on the notion that speech-community members are more likely to feel welcomed in situations denoted by intra-group domains than in situations denoted by extra-group domains.

Experiment 1: Need Affiliation

Need affiliation has been defined by Atkinson (1965) as "concern over establishing, maintaining and restoring positive relationships with others." Modeled after physiological needs, need affiliation is said to be a function of social deprivation in much the same way as hunger is a function of food deprivation. Thus, the degree of one's need affiliation is positively related to the frequency of rejecting attitudes aimed at frustrating one's desire to be accepted by others (Atkinson, Heyns & Veroff, 1954).

It was reasoned that in the case of Spanish-English bilinguals of Puerto Rican descent who are largely confined to an urban, Spanish speaking ghetto, English is commonly used in extra-group domains which, in turn, are more likely to be associated with social deprivation than are intra-group domains. It was, consequently, hypothesized that (1) Spanish-English bilinguals (of the kind just described) would exhibit greater need affiliation in English than in Spanish, and that

(2) Spanish-English bilinguals would exhibit progressively greater need affiliation in both languages as they shift from typically intra-group domains (such as familial relationships) to more extra-group domains (such as the sphere of work or education). The third and final hypothesis in this experiment stated that people with less responsible jobs would show greater need affiliation in either language and in all domains than people with more responsible jobs. This prediction was based on the belief that in the American minority group context people with higher occupational status are less likely to be rejected by others than are people with lower occupational status.

Method

To test these hypotheses, use was made of word association (WA) scores obtained by Cooper (1968) from a group of 32 Puerto Rican bilinguals from a Spanish-speaking urban ghetto near New York.

Cooper administered the WA test in English and in Spanish using 10 stimulus words, each of which referred to a behavioral domain. The words used were school, home, factory, church, street, escuela, casa, factoría, iglesia, and calle. Each stimulus word was presented separately with the instructions to say as many different words as the stimulus word brought to mind. Responses were confined to the language of the stimulus word, allowing one minute per domain.

To these series of WA responses, a measure based on Henley's index of need affiliation was applied. Henley (1967) analyzed published literary works and found that the frequency of plural nouns referring to persons was positively correlated with the need affiliation imagery of the society in which the works were published. It was therefore decided to represent S's degree of need affiliation in each language and domain by the proportion of his "human" responses (responses referring to persons, such as "teacher," "uncle," "policeman," etc.) to the total number of his WA responses in the relevant series.

Subjects were divided into two groups based on occupational status. Respondents in the High status group were either working at jobs requiring relatively high degrees of skill or they were full time students at the high school level or beyond. Respondents in the Low status group were either housewives or working at relatively routine and unskilled jobs or unemployed or they were students below the high school level.

Results

The need affiliation scores were subjected to an analysis of variance, presented in Table 1. Significant main effects were found for language and for domain but not for occupational status. As expected, greater need affiliation ratio scores were obtained in English than in Spanish. Furthermore, the size of need affiliation proportions, when words for both languages were combined, varied by domain, suggesting that need affiliation is revealed not only by language but by sphere of activity as well. The average need affiliation scores, by language and domain, are presented in Table 2. The largest average need affiliation ratios were obtained for the domains of work and education and the smallest for religion, neighborhood and home. The direction of these domain differences supports the hypothesis that extra-group domains are more socially depriving and need affiliation producing than intra-group domains.

Insert Tables 1 & 2 about here

Experiment 2: Future Orientation

Future orientation has been defined as the extent to which one's preoccupation with things and events that may (or may not) happen exclude one's preoccupation with things and events that have already taken place. According to May (1950) and Rokeach and Bonier (1960), "preoccupation with the future" is related to cognitive ambiguity (that is, to emotionally charged, incongruent or vague plans of action) and to conflicting world views causing a person to be anxiously undecided as to what scale of values to adapt and what scale of values to reject.

It was reasoned that to Puerto Rican Spanish-English bilinguals living in the modern and highly complex urban society of New York, English would be associated with newer, more changeable, less predictable and, in general, more ambiguous social expectations than the traditional ones associated with Spanish. It was therefore predicted that Spanish-English bilinguals would show greater future orientation in English than in Spanish.

Presumably, Puerto Rican Spanish speaking ghettos in this country are communities in transition, experiencing severe socio-cultural tension. It is felt that the younger and more educated members of such communities are in conflict with the traditional Puerto Rican way of life (viewing it as being old-fashioned) as well as with the modern world whose scale of values they have not as yet fully accepted.

Fluctuating between two world views, these young people are expected to be critical of traditional authorities when involved in intra-group domains whereas--when involved in extra-group domains--they are expected to be critical of modern authorities. It was, consequently, hypothesized that young Puerto Rican Spanish-English bilinguals in New York would exhibit greater future orientation in both extra-group domains (school, work sphere) and intra-group domains (home, friendship) than in intermediate domains over which control is mixed.

Method

To test these hypotheses, an experiment was conducted with 18 Spanish-English bilinguals. The subjects were all males, all teenagers, all attending the same high school, all living in New York and all members of the same Puerto Rican Youth Club. The experiment was conducted in a classroom and it took about 45 minutes to complete.

Future orientation scores were obtained as follows. Each S was presented with a page containing six pairs of incomplete sentences and instructed to complete in writing only one sentence from each pair. The six pairs of incomplete sentences referred to six different domains: home, friendship, neighborhood, religion, education, and work. The two incomplete sentences in each pair differed from each other with respect to time. One sentence was oriented to the future and the other to the past. Thus, for example, the pairs of incomplete sentences referring to the domains of friendship and education respectively, were:

It is good to make new friends, because...

It is good to keep old friends, because...

Last year school was very difficult for some students, because...

Next year school will be very difficult for some students, because...

The incomplete sentences were presented in two forms: Spanish and English. Out of the 18 subjects in the group, nine were randomly selected to complete (in Spanish) the Spanish sentences and the other nine to complete (in English) the English sentences. Future orientation scores (number of "future oriented" sentences chosen) were determined for each S, domain, and language.

In order to see whether future orientation scores varied with respect to need affiliation, Ss were also presented with a written version of Cooper's WA test. The test was administered in English to those who took the English form of the future orientation test, and in Spanish to those who took the Spanish form. The stimulus words in this test were printed each on a separate page and presented with the instructions to write the first ten different words that the stimulus word brought to mind. To these series of WA responses (ten in each series) the modified version of Henley's index of need affiliation was later applied and need affiliation ratio scores calculated.

Results

An analysis of variance of future orientation scores by language, domain and need affiliation was performed. The analysis is presented in Table 3. Significant main effects were observed for language and for domain. The need affiliation effect approached significance ($p < .10$). The average number of future oriented sentences chosen by language and domain are presented in Table 4. Greater future orientation ratio scores were observed in English than in Spanish. Higher future orientation scores were observed in the more extra-group domains (work, education) and the more intra-group domains (home, friendship) than in the intermediate domains over which control is mixed (religion, neighborhood). The higher need affiliation group had higher future orientation scores than did the lower need affiliation group.

Insert Tables 3 & 4 about here

Summary and Conclusions

In the two experiments reported in this paper, hypotheses relating future orientation and need affiliation to language, domain and job responsibility were tested on two groups of Spanish-English bilinguals of Puerto Rican descent living in or around the city of New York.

It was found that both future orientation and need affiliation were greater in English than in Spanish. Inasmuch as need affiliation is viewed as a function of social deprivation and future orientation as a symptom of cognitive ambiguity or conflicting world views, these findings suggest that to these subjects English is associated with stronger social rejection and more difficult-to-comprehend social expectations than is Spanish.

Need affiliation and future orientation also varied significantly along the extra-group to intra-group continuum of domains yielding, however, uniquely different patterns of variation. While need affiliation decreased progressively from extra-group domains (over which control is largely in the hands of community outsiders) to intra-group domains (over which community members are predominantly in control), future orientation was found to be higher at both extremes of the continuum and lower in intermediate domains over which control is mixed. The pattern of distribution of need affiliation ratios supported the notion that social deprivation is more likely to be felt in extra-group than in intra-group domains. On the other hand, the distribution of future orientation ratios supported the notion that the intensity of the conflict between traditional and modern world views is likely to be greater in either extra-group or intra-group domains than in intermediate domains in which traditional and modern authorities co-exist.

Contrary to expectation, need affiliation scores did not vary significantly with respect to job responsibility. The overall results obtained, however, supported the general notion that need affiliation and future orientation vary in degree from spheres of activity in which Spanish is most commonly used to spheres of activity in which English is most commonly used, and that these variations are capable of being differentially reflected in the language of Puerto Rican Spanish-English bilinguals.

Footnote

[1] I am indebted to Dr. R. Cooper whose interest, fruitful criticism and clarity of thought helped guide this work to completion. This study was supported under DHEW Contract No. OEC-1-7-062817-0297, The Measurement and Description of Widespread and Stable Bilingualism, Joshua A. Fishman, Project Director. Data analysis was supported by a grant to the Project Director from the College Entrance Examination Board.

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Table 1

Analysis of Variance of Human Ratio

(Need Affiliation) Scores

Source of variance	Sum of squares	df	Mean square	F	F_{95}	F_{99}
Between subjects	19573.09	31				
Occupation (C)	110.73	1	110.73	.17	4.17	7.56
Error (b)	19463.08	30	648.77			
Within subjects	65904.10	288				
Language (A)	701.69	1	701.69	3.78*	4.17	7.56
Domain (B)	12043.27	4	3010.82	12.10**	2.44	3.47
AB	239.49	4	59.87	.48	2.44	3.47
AC	181.84	1	181.84	.98	4.17	7.56
BC	1855.50	4	463.87	1.86	2.44	3.47
ABC	446.16	4	111.54	.89	2.44	3.47
Error (w)	50436.15	270				
Error$_1$ (w)	5571.17	30	185.71			
Error$_2$ (w)	29851.83	120	248.77			
Error$_3$ (w)	15013.15	120	125.11			
Total	85477.19	319				

* $p > .07$
**$p > .01$

Table 2

Mean Need Affiliation Ratio Scores by Language and Domain

Language	Domain					
	Work	Education	Religion	Neighborhood	Home	Total
English	33	24	20	17	14	22
Spanish	28	23	17	13	14	19
Total	30	23	18	15	14	20

Table 3

Analysis of Variance of Future Orientation Ratio Scores

Source	SS	df	MS	F	F_{90}	F_{95}	F_{99}
Between Subjects	6.63	17					
Language (B)	1.33	1	1.33	4.75*		4.60	
Need Affiliation (C)	.92	1	.92	3.29^+	3.10		
BC	.41	1	.41	1.46			
Error (b)	3.97	14	.28				
Within Subjects	20.33	90					
Domain (A)	3.96	5	.79	4.38**			3.29
AB	1.23	5	.25	1.39			
AC	1.64	5	.33	1.83			
ABC	.72	5	.14	.78			
Error (w)	12.78	70	.18				
Total	26.96	107					

$^+$ $p < .10$
* $p < .05$
**$p < .01$

Table 4

Mean Number of Future Oriented Sentences Chosen by Language and Domain

	Formal		Neutral		Informal		
Language	Work	Education	Religion	Neighborhood	Friendship	Home	Total
English	4	8	4	4	7	5	32
Spanish	4	6	1	0	3	6	20
Total	8	14	5	4	10	11	52

Chapter
IV-3-b

WORD NAMING AND USAGE SCORES FOR A SAMPLE OF YIDDISH-ENGLISH BILINGUALS

Judah Ronch

The purpose of this study is to explore the importance of societal domains of verbal interaction in connection with two measures of the bilingual performance of a sample of Yiddish-English speakers in New York City. The methods employed have been adapted from those used by Cooper (1968) and Cooper and Greenfield (1968) with Puerto Rican bilinguals. Their adaptation for Jewish bilinguals should be of importance for researchers studying Jewish populations in various parts of the world in terms of their distance-proximity to co-territorial populations.

Subjects

The subjects of the present study were a group of 15 (8 M and 7 F) European-born Jewish adults who spoke Yiddish as children while living in Europe, and who continued to use Yiddish actively after they arrived in the United States. Their ages ranged from 55 to 80 years, with the greatest number of individuals clustering around the 67-70 year age range. All of these individuals had come to the U.S. between 1900 and 1929, and, as a result, had been in the United States for 40 to 60 years by the time they served as Ss for this research.

All Ss were active in Jewish organizational and cultural work on behalf of Yiddish language and literature. The societal domains hypothesized as being of importance in their bilingual usage were: (a) home, (b) ethnic behavior: Passover Seder celebration, (c) work, (d) neighborhood, and (e) Jewish cultural activities.

Procedures

All Ss were given a Word Naming test in Yiddish and in English and a Yiddish Usage Rating scale in English. The language in which the Word Naming scale was administered first (i.e., Yiddish or English) was randomly varied. The Word Naming task always preceded the Usage Rating scale.

All responses were tape recorded to facilitate subsequent data analysis and to enable E to make the testing situation as informal as possible.

1. Word Naming. Each subject was asked to give as many different English and Yiddish words as he could which name objects or other items appropriate to a given domain. For example, for the domain of home, Ss were asked to name as many English (Yiddish) words as they could that represent things that could be seen or found in a kitchen. The number of individual words a subject gave in 60 seconds were counted as his score for that domain in that language. The subject received the entire series first in one language and then in the other, with the instructions, questions and examples in Yiddish being direct translations of those in English. Thus, each S received 10 scores, 5 in each language.

2. Usage Rating. All Ss were asked how much of their talk was in Yiddish when they spoke to particular people (e.g., husband, co-worker, children, friends) who knew both English and Yiddish. The suggested settings for their interactions with these interlocutors were the home, the Passover Seder, the Yiddish-oriented cultural club, the neighborhood, and the place of employment. Ss were asked to rate the relative amount of Yiddish they spoke with each inter-

locutor on a 7-point scale that ranged from speaking only in Yiddish to speaking only in English with the specified interlocutor in the specified setting.

A total score for each subject in each domain was obtained by summing responses across interlocutors within settings.

Data Analysis

1. Word Naming. Table I presents the mean scores for English and Yiddish. An analysis of variance (Table II) yielded a significant language by domain interaction [$F(14,56) = 17.67$ ($p < .001$)], indicating that the ratio of English to Yiddish words named varied as a function of domain.

Further analysis of the data (t-test) showed that for the domains of cultural activity (number of authors named) and the Passover Seder, the mean number of words named in each language differed significantly ($p < .01$), there being a greater number of words named in Yiddish than in English in these domains. In addition, for the home domain, there was a significant difference between mean number of words named in each language ($p < .05$), but in the opposite direction, that is, more words were given in English than in Yiddish in this domain. The remaining domains showed no significant between-language differences.

2. Yiddish Usage Rating. Table III shows the mean Yiddish usage rating scores for the five domains. An analysis of variance (Table IV) revealed that the effect of domain on language usage rating was significant[$F(4:56) = 10.31$ ($p < .01$)]. This significant main effect was due to the cultural domain which was different from the other domains studied (Newman-Keuls test on 5 means). That is, Ss rated themselves as using more Yiddish in the Yiddish cultural

domain than in any of the other domains investigated.

Finally, Pearson product-moment correlations between Usage Rating scores and differences in Word Naming scores (Yiddish-English) for each domain, and for the sum of the Usage Rating scores and sum of the difference scores,were computed to ascertain the relationship between those two aspects of verbal behavior. These correlations were all small and nonsignificant. It would appear then that these two measures, one "self-report" and the other "proficiency" in nature, are substantially independent in the population under study.

Discussion

From the above results, certain patterns of bilingual usage for the group under study can be noted. First, this group tends to report its greatest amount of Yiddish usage in Yiddish cultural activities, and second, their ability to name words in English and Yiddish differs most in domains related to such Yiddish cultural activity. Thus, the results obtained by the two instruments were consistent. However, these two types of measures seem to be substantially independent for this group. That is, for a given individual, one cannot predict a score obtained from one technique from that obtained from the other.

In general, our Ss indicated that they felt comfortable enough using English but that they were more comfortable using Yiddish. This is evidenced by the fact that the domains in which mixed usage is possible (e.g., home, Seder (because of the presence of children), neighborhood, and work) all were rated between the 34% to 45% level of Yiddish usage, while the cultural domain, in which the positive attitude and interest that the people have toward Yiddish gets institutionalized expression, was rated at about 75% Yiddish usage. Despite the fact that these people have been here for so many years, they have fought cultural assimilation through deep involvement in a broad range of Yiddish-language cultural organizations and activities, including choral groups, theater groups, literary and cultural clubs, and schools for the education of their children and grandchildren. It would therefore seem that their language behavior has come to exist on two levels, the first being a bilingual Yiddish-English interaction with others in their everyday life, and a second, more intensely Yiddish-oriented and Yiddish-preserving level of cultural activity.

Comparison of Word Naming Results with Jersey City Puerto Rican Sample

The Word Naming results obtained from the group under study were compared with the results obtained by Cooper (1968) using a group of Spanish-English bilinguals who were drawn from the Puerto Rican population of Jersey City. Cooper divided his sample into six subgroups based on age and number of years in the United States. The group which most closely resembles the Yiddish-English bilinguals used in the present study were those Puerto Rican bilinguals who had been in the U.S. for more than 11 years and were 35 years of age or older (N=8). For that group only the domain of work yielded a significant difference between Spanish and English Word Naming scores, with more words named in Spanish than in English. This finding differs from our finding for the Yiddish-English group, for which no significant difference was found for the work domain. There were, however, results obtained by Cooper which are congruent with ours.

In the home domain, more words were named in English than in Spanish, though this difference was not statistically significant. In the Yiddish-English sample, we found a significant difference in the same direction. For the religion domain, which is roughly parallel to the culture domain used in the present study, Cooper found that more Spanish than English words were named. This difference was again not statistically significant. This difference was significant, however, for the total Puerto Rican sample given the Word Naming task (N=38), and was the only significant difference in either direction for all of the domains tested, for the total group, all subgroups combined.

The congruities between the two sets of results are best understood in terms of length of residence in the United States and consequent degree of interaction with monolingual English speakers. Our Yiddish sample has spent many more years in the United States and has learned much more English than have most Puerto Ricans in the New York Area. As a result, our Yiddish-English bilinguals have maintained Yiddish dominance only in distinctly Jewish ethnic-cultural domains. While tending toward English at home, older Puerto Ricans are still Spanish dominant at work and in church with no significantly English dominant domain yet in evidence. That older Puerto Ricans too are moving toward greater use of English is indicated by the fact that home is no longer Spanish dominant for them insofar as this is revealed by the Word Naming task.

Conclusion

A sample of Yiddish-English bilinguals active in Yiddish cultural work was tested on Word Naming and Usage Rating techniques previously developed for a study of Puerto Rican Spanish-English bilinguals. The Yiddish-English bilinguals proved to be significantly stronger in Yiddish in the cultural domain on both techniques. They also proved to be significantly stronger in Yiddish in the ethnic behavior domain and in English in the home domain on Word Naming.

In comparison with older Puerto Rican Spanish-English bilinguals who have been in the U.S.A. for 11 years or more the Yiddish-English bilinguals produce proportionally more English words in the home domain and proportionally less mother-tongue words in the work domain. Both groups are dominant in their mother tongues in the ethnic domains of cultural and religious activity.

Our impression of the utility of the Word Naming and Usage Rating techniques is strengthened as a result of the face validity of the findings obtained on two different bilingual populations.

Footnote

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Table I

WORD NAMING SCORES

	Domain				
Language	Family	Neighborhood	Cultural	Seder	Work
English	18.8*	13.5	6.2**	10.8**	13.9
Yiddish	16.7	12.8	12.6	15.4	13.1

* $p < .05$ for difference between means for English and Yiddish

**$p < .01$ for difference between means for English and Yiddish

Table II

ANALYSIS OF VARIANCE - WORD NAMING

Source	df	ms	F
Subjects	14	162.12	
Domain	4	260.4	9.50*
Sub x Dom	56	27.4	
Language	1	82.1	3.97
Lang x Dom	14	106.4	17.67*
Subj x Lang	4	20.7	
Dom x Lang x Subj	56	6.02	
TOTAL	149		

*p $<$.01

(Edwards 1966)

Table III

MEAN YIDDISH USAGE RATING

	Domain				
	Family	Seder	Cultural	Neighborhood	Work
Rating	4.5	3.8	7.7	3.9	3.4

*p < .01 difference between rating for cultural domain and other domains

Table IV

ANALYSIS OF VARIANCE - USAGE RATING

Source	df	ms	F
Subjects	14	2101.35	
Domains	4	4461.25	10.31*
Dom x Sub	56	432.80	
TOTAL	74	966.22	

$^*p < .01$

(Edwards 1966)

Chapter
IV-4-a

Abstract

Listening Comprehension in a Bilingual Community

Robert L. Cooper, Barbara Fowles, and Abraham Givner

Naturalistic conversations between bilingual Puerto Ricans using both Spanish and English were tape recorded and used to assess degree of bilingualism. The conversations were played to 35 Puerto Ricans who lived in the same urban neighborhood near New York. Their bilingual listening comprehension ability was studied in relationship to a variety of linguistic skills and was also compared to that of two sociolinguistically contrasting groups. Relative ability to interpret conversations reflecting a variety of speech styles was found to have a substantial relationship to the extent of the Puerto Rican respondents' verbal repertoire in English as independently judged. The comparison of their performance with that of the other two groups indicated that knowledge of communicative appropriateness requires more than linguistic competence per se.

LISTENING COMPREHENSION IN A BILINGUAL COMMUNITY[1]

Robert L. Cooper, Barbara R. Fowles, and Abraham Givner[2]

Yeshiva University

Psychologists have developed several methods for the measurement of degree of bilingualism, or relative proficiency in two languages. For the most part, these techniques are "indirect" (Macnamara, 1967a). That is, the performances they describe, such as speed of naming pictures (Ervin, 1961) or the number of discrete words produced within time limits (Johnson, 1953; Macnamara, 1967c) have a less than obvious relationship to the criterion behavior of relative linguistic proficiency. Furthermore, with the notable exception of a measure devised by Lambert (1955), who compared the speed of responding to directions given in each of two languages, most of these techniques have described various aspects of verbal production, although relative proficiency can also vary along other dimensions, such as listening, reading, and writing.

The technique which is described in the present paper was designed to yield not only a more direct estimate of bilingual proficiency than those reported in the past but also a measure of bilingual listening comprehension ability. It differs from other listening comprehension techniques not only in offering a measure of relative proficiency (instead of a score in one language or the other) but also in being devised to reflect bilingual proficiency in varying types of social context. The attempt to construct a listening comprehension test in terms of differing social contexts was made on the assumption that speakers vary with respect to the number and kinds of social situation in which they can communicate effectively (Fishman, 1965, 1968a; Gumperz, 1964; Hymes, 1967). It was believed that a technique which was designed to reflect communicative competence would provide a more adequate estimate of the bilingual's relative proficiency than one which was confined to a single context.

The present report describes the performance on a contextualized bilingual listening comprehension task of members of a Puerto Rican neighborhood near New York City. The paper also compares their performance to that of two contrasting groups. In addition, the relationship between bilingual listening comprehension ability and other bilingual skills, as observed in this neighborhood, is described.

Method

Stimuli

Five tape-recorded, naturalistic conversations, between Spanish-English bilinguals living in New York, were obtained. The participants in all but one of the conversations were Puerto Rican college students who spoke fluent, native English and Spanish and who were adept at style switching. In one conversation, one of the participants was a parish priest, who played himself in that role, and whose Spanish was fluent but not native.

Each conversation was obtained in the following manner. First, the "actors" agreed upon a social situation in which switching between English and Spanish would be appropriate among Puerto Ricans in New York. Second, they mapped out a story-line which determined the general direction of the conversation in that situation, i.e., who would say what to whom. No scripts were prepared, however. The actors then assigned the roles to one another and "role played" or ad-libbed the scene, using Spanish when they felt Spanish was appropriate and English when they felt English was appropriate. Finally, they played back the conversation to themselves to determine whether or not it sounded natural. If parts of the conversation struck them as unnatural, those portions were re-recorded and at a later time spliced into the tape. Each completed conversation lasted between two to three minutes.

Each conversation was intended to represent a different type of social context. Consequently, the relationships between speakers (e.g., mother-daughter, priest-parishioner), the locales or settings (e.g., home, rectory), the topics of conversation (e.g., the Puerto Rican Parade, the health of an uncle), and the purposes of the interactions (e.g., offering an invitation, dictating a letter) all varied from conversation to conversation.

Subjects

The conversations were played to Ss as part of an intensive study of Spanish-English bilingualism within a four-block Puerto Rican area of the "downtown" section of Jersey City (Fishman, Cooper, Ma, *et al*., 1968). Living there were 431 persons of Puerto Rican background who comprised 90 households. Half of this group consisted of children under the age of 13. Of those who were 13 or older, over one-fifth (N=48) agreed to participate in interviews of which the listening comprehension test formed a part. An attempt was made to obtain both male and female respondents who would represent the range of ages (of those 13 or older) and the range of occupational and educational backgrounds to be found in that neighborhood. Although not all respondents completed all portions of the interview, 35 Ss heard and responded to all five of the taped conversations.

Procedure

After a conversation had been played twice to the respondent, he was asked a series of questions designed to assess his comprehension of the passage. In addition to questions which were asked to test comprehension of the English and Spanish portions of each conversation, questions were asked to assess the respondent's interpretation of various aspects of the social situation represented by the conversation as a whole. For example, respondents were asked to identify the role-relationships between speakers (e.g., boss-secretary), the degree of social distance or intimacy between speakers, the motivation underlying certain remarks made by the speakers, the conversation's setting, and for some conversations, the educational and occupational status of the speakers.

The listening comprehension test was administered as part of an individual, tape-recorded interview which lasted from two to four hours. Interviewers were bilingual in English and Spanish and were able to conduct the interview in whatever language or combination of languages that was preferred by the respondent. Interviews were held in the respondent's home or in a field office in his neighborhood.

Scoring

For each subtest, the percentage which each respondent correctly answered of items assessing comprehension of the English portion was subtracted from the percentage which he correctly answered of items assessing comprehension of the Spanish portion. As a result, positive difference scores indicated that the respondent understood more of the Spanish than the English portion and negative difference scores indicated the reverse. The percentage correct of the other types of item, assessing interpretation of various components of the conversation as a whole, such as the role-relationships among the speakers, was also computed. Correctness was scored in terms of the impression intended by the actors in their formulation of the social situation.

Other Variables

The five comprehension difference scores, one for each subtest, and a total difference score based on all five subtests, were studied in relationship to the following five variables, reflecting skills in speaking, reading, and writing. Scores on these variables were obtained independently of the authors of this paper.

1. Accented Speech. Respondents were rated by independent judges in terms of the degree to which the phonological and syntactic structures of one language appeared to influence speech produced in the other, as observed during the interview. A seven-point scale was used on which high scores indicated Spanish influence upon English speech, low scores indicated English influence upon Spanish speech, and scores in between indicated maximum language distance, or no influence by either language upon speech produced in the other.

2. Reading. During the extended interview, respondents were asked to read an English word list, a Spanish word list, and two short paragraphs in English and in Spanish. Based on their performance on these tasks, respondents were rated by independent judges

on a five-point scale, in terms of their ability to read in the two languages. High scores indicated that the respondent could read only in Spanish (or not at all), low scores indicated that he could read only in English, and intermediate scores indicated that he could read in both languages.

3. Writing. During a language census of the neighborhood (Fishman, 1968b), a representative of each household was asked whether each member of that household could write in English and in Spanish. A three-point scale was used to claim writing proficiency in each language. The English rating was subtracted from the Spanish rating for each respondent so that positive scores indicated Spanish dominance and negative scores indicated English dominance.

4. Spanish repertoire range. Based on the notion of verbal repertoire which has been advanced and elaborated by Gumperz (1964, 1967), respondents were globally rated by independent judges in terms of the number of Spanish speech styles they were observed to use during the interview and the fluency with which they used them. A four-point scale was employed, which ranged from the use of only a single, casual style to the fluent use of several speech styles, including more careful, formal Spanish.

5. English repertoire range. Respondents were also rated by independent judges in terms of the number and fluency of English speech styles which were observed during the interview. A six-point scale was used, ranging from knowledge of only a few words and phrases, at one end of the dimension, to the ability to employ both careful and casual speech styles, in a maximally fluent manner, at the other.

Ratings on the English and Spanish repertoire range scales and on the reading and accent scales were made by the linguists who had performed a phonetic analysis of representative portions of each respondent's speech, as recorded during the interview (Ma and Herasimchuk, 1968). The accent , reading, and writing scales, as well as the listening scale (total score), can be regarded as degree of bilingualism scales on which high or positive scores indicate Spanish dominance, low or negative scores English dominance, and intermediate scores no difference or "balance". The Spanish and English repertoire range scales, on the other hand, are unilingual scales, reflecting performance in a single language only.

Data Analysis

Correlations were obtained among the listening comprehension difference scores and between these difference scores and the other scales. In addition, an analysis of variance was performed on the respondents' comprehension scores in terms of the five conversations and the several types of item, including identification of relationships, comprehension of English content, and comprehension of Spanish content.

Subsidiary Administrations

The listening comprehension test was individually administered to two groups of Ss whose backgrounds differed from those of the Jersey City respondents. One group (N=20) consisted of students at a suburban high school near New York City. These Ss had all completed three or four years of high school Spanish courses. The other group (N=19) consisted of Latin American, Spanish-speaking students enrolled in an advanced course in English as a second language at a university in New York City. It was expected that each of these groups would differ from the Jersey City respondents with respect to their performance on the listening comprehension test. Each group's performance was compared to that of the Jersey City respondents by means of analysis of variance.

Results

Relationships among Bilingual and Unilingual Scales

Table 1 presents the intercorrelations among the bilingual and unilingual scores for the Jersey City respondents. Substantial correlations were observed among the four degree of bilingualism scales, ranging from .41 to .77, with a median coefficient of .59. Thus, the different dimensions of degree of bilingualism were related to one another. The correlations were not so high, however, that an individual's rank on one dimension could be substituted for his rank on another with a high degree of confidence. The dimensions were, in other words, at least partially independent.

Substantial correlations were also observed between the English repertoire range scale and the degree of bilingualism scales, ranging from -.54 to -.69. The Spanish repertoire scale, on the other hand, was not significantly related to any of these variables. Its lack of relationship to the other scales can be attributed to its relatively small variance, as can be seen from the standard deviations presented in Table 1. The respondents were much more alike in terms of their Spanish repertoire range ratings than they were in terms of their scores on the other variables ($p < .01$ for the difference between the variance of the Spanish repertoire ratings and that of four of the five scales). The greater homogeneity of the Spanish repertoire range ratings is consistent with the fact that for most of the respondents, Spanish was the first language learned and was primarily a home and neighborhood language. Thus, there was more opportunity for the respondents to vary with respect to their English skills, due to differential exposure to English at school and at work. It is likely, therefore, that the significant relationships that were observed among the degree of bilingualism scales were caused primarily by an underlying common variation in English competence.

Insert Table 1 about here

Listening comprehension and English repertoire range. The correlations obtained between the individual listening comprehension subtest difference scores and the English repertoire range ratings were all significant, varying from -.36 to -.47 ($p < .05$ for the lowest coefficient, $p < .01$ for the others). These correlations were substantially lower, however, than that obtained between the total listening comprehension score and the English repertoire range scale ($r = -.68$). The improvement in prediction obtained by using the total score was not primarily due to the difference in length between a single subtest and a group of subtests, inasmuch as the intercorrelations among the comprehension subtests were quite low, ranging from .04 to .41, with a median coefficient of .24. Rather, the improved prediction of the English repertoire range ratings was probably due to the fact that the total comprehension score was based on a set of conversations that represented a range not only of social situations but also of the speech styles appropriate to them.

Analysis of Variance: Jersey City and Comparison Groups

Table 2 summarizes the analysis of variance of the Jersey City respondents' performance on items assessing comprehension and interpretation of the taped conversations. Significant main effects were observed for conversations and for item types. That is to say, some conversations were more difficult to interpret and some types of items more difficult to answer than others. The most difficult conversation was one which represented a bull session among college students and which was carried on almost entirely in rapid, excited English. Not surprisingly, among the most difficult types of item was that assessing comprehension of the English portions of the conversations, and among the easiest was that assessing comprehension of the Spanish portions. A significant interaction between conversation and item type was also observed, indicating that the difficulty of item types, relative to each other, was not constant across stories. For example, there was a greater difference between the average English and Spanish comprehension scores for conversations which took place outside the home and neighborhood than for conversations which took place within such settings. Similarly, the relationship between the ability to comprehend the manifest content (what was said) and the ability to interpret the social content (what was meant) differed by conversation. For example, respondents correctly answered a greater proportion of social content items than manifest content items for a conversation taking place within a home, whereas the reverse was true for a conversation taking place within an office. Thus, knowing what was said did not necessarily enable listeners to absorb the full communicative impact of a conversation, and, conversely, missing the details of manifest content did not necessarily prevent listeners from grasping the speakers' intent.

Insert Table 2 about here

As expected, the performance of each comparison group differed from that of the respondents in Jersey City, which can be seen in the analyses of variance summarized in Tables 3 and 4. In each analysis, a significant effect was observed for the difference between groups. Both the high school students and the Latin American students, probably due to their superior educational background, had higher average total scores than did the Jersey City respondents. However, the comparison groups were not uniformly superior in performance as can be seen from the significant interactions involving group differences. The high school students, for example, who understood more of the English portions of the conversations, understood less of the Spanish portions than did the Jersey City respondents. The high school students also differed in the expected direction from the Jersey City Ss with respect to the interpretation of role relationship involved in one of the conversations. The Jersey City respondents more often than the high school students correctly identified the participants in one conversation as a priest and parishioner, a relationship which the high school students most often identified as that of teacher and student.

The Latin American students did not differ from the Jersey City group with respect to the amount of Spanish and English understood.

That is, both groups correctly answered about the same proportion of the English items and about the same proportion of the Spanish items. However, the Latin American students differed from the Jersey City respondents in terms of some of their interpretations of the social situations represented by the conversations. For example, the Latin Americans were better than the Jersey City _S_s in interpreting the role relationships between speakers in conversations taking place at school and at work. The Jersey City respondents, on the other hand, were better able than the Latin Americans to interpret the relationships involved in conversations representing the more local and intragroup domains of home and church. The Latin Americans also consistently gave lower educational and occupational ratings to those speakers who were intended to occupy relatively prestigeful statuses than did the Jersey City respondents. Thus, the similarity between the Jersey City and Latin American respondents' understanding of manifest content did not prevent the two groups from interpreting the conversations' social meaning in divergent ways. These differences are indicative of the extent to which speech community membership and knowledge of communicative appropriateness go beyond language competence per se.

Discussion

The moderate correlations which were observed among the degree of bilingualism scales supports the argument that bilingual proficiency can vary along several partially independent dimensions (Macnamara, 1967b). Thus, reliance upon performance in a single modality may yield an inadequate estimate of bilingual ability. Inadequate appraisals can also result from confining one's attention to a narrow range of contexts. The sharply increased prediction of English repertoire range ratings, which were obtained by combining comprehension scores based on a range of speech styles, testifies to the usefulness, as maintained by Fishman (1965, 1966, 1968), of a contextualized approach to the measurement and description of bilingual skills.

The listening comprehension technique described in this report promises to be useful in several ways. First, it should prove useful in assessing bilingual skills in those situations of language contact in which a second language is known primarily on a receptive basis. Second, the use of bilingual tapes should be helpful in describing the abilities of those who claim, either from a mistaken estimate of their own competence or from a reluctance to be identified with a language of lesser prestige, that they are unable to understand a given language. Some of the women in the Jersey City group, for example, told the interviewers that they did not know any English, and some of the Latin Americans professed not to be able to understand the variety of Spanish that was presented on the tapes. Nonetheless, all respondents understood at least some of the material that was presented in each language. Finally, the technique should enable us to learn more about the components of communicative competence, the ability which enables a speaker to know what to say, with whom, in what language, in what manner, and at what time (Hymes, 1967). The analysis of the responses of sociolinguistically contrasting groups to recorded conversations may help us to learn what elements in the conversation distinguish those who are members of a given speech community from those who are not. That is, the technique may help us to distinguish between the linguistic and sociolinguistic abilities which are necessary before one can fully understand the meaning of a conversation.

Footnotes

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Table 1

INTERCORRELATIONS AMONG BILINGUAL AND UNILINGUAL SCALES, JERSEY CITY RESPONDENTS

	Variable						
	A	BR	BW	SRR	ERR	$\bar{x}$	S.D.
Bilingual scales							
Listening	.50**	.41*	.44**	-.06	-.68**	2.16	.94
Accentedness		.74**	.77**	.27	-.69**	2.03	1.68
Bilingual Reading			.67**	.19	-.61**	2.57	1.38
Bilingual Writing				.29	-.54**	2.29	1.39
Unilingual Scales							
Spanish repertoire range					.04	2.03	.77
English repertoire range						3.11	1.54

* $p < .05$
**$p < .01$

Table 2

ANALYSIS OF VARIANCE OF LISTENING SCORES:

JERSEY CITY RESPONDENTS

Source	df	ms	F
Subjects (S)	35		
Item types (A)	6	40.07	33.12**
A x S	210	1.21	
Conversations (B)	4	45.04	25.89**
B x S	140	1.74	
A x B	24	8.04	8.74**
A x B x S	840	.92	
Total	1259		

**$p < .01$

Table 3

ANALYSIS OF VARIANCE OF LISTENING SCORES:
HIGH SCHOOL STUDENTS v. JERSEY CITY RESPONDENTS

Source	df	ms	F
Between Subjects (S)	62		
Groups (C)	1	17.86	30.27**
Error (b)	61	.59	
Within Subjects	2072		
Item types (A)	6	2.64	22.00**
A x C	6	4.07	33.92**
A x S	354	.12	
Conversations (B)	4	4.13	25.81**
B x C	4	1.44	9.00**
B x S	236	.16	
A x B	24	1.34	33.50**
A x B x C	24	1.88	47.00**
A x B x S	1414	.04	
Total	2134		

**$p < .01$

Table 4

ANALYSIS OF VARIANCE OF LISTENING SCORES:
LATIN AMERICAN STUDENTS v. JERSEY CITY RESPONDENTS

Source	df	ms	F
Between Subjects (S)	61		
Groups (C)	1	11.18	13.15**
Error (b)	60	.85	
Within Subjects	2046		
Item types (A)	6	4.52	34.77**
A x C	6	.52	4.00**
A x S	349	.13	
Conversations (B)	4	4.51	112.75**
B x C	4	1.09	27.25**
B x S	233	.04	
A x B	24	1.28	11.64**
A x B x C	24	.38	3.45**
A x B x S	1396	.11	
Total	2107		

**$p < .01$

Chapter
IV-4-b

LANGUAGE SHIFT AND THE INTERPRETATION OF CONVERSATIONS[1]

James Kimple, Jr.

Lambert (1967) has demonstrated that the language which one hears is associated with stereotyped impressions of its speakers, a finding which supports the sociolinguists' view that language is not merely a medium for content but is itself a referent, a source of meaning. Lambert does not, however, deal with the speech situation in which more than one language variety occurs. He suggests that conversations which employ language switching invoke contrasting stereotypes, but he notes the necessity of research designed to examine the consequences of using different languages from the bilingual's perspective.

Cooper, Fowles, and Givner (1968) have designed a technique which suggests an approach to measuring the bilingual's awareness of the social meaning of differences in the use of language varieties in conversations. Several bilingual Puerto Ricans adept at language switching produced five taped, naturalistic conversations which employed language shifts. Each completed conversation represented a different type of social context such that the role-relationships among the speakers and the locations, the topics and the purposes of the interactions varied. The completed tapes were played to bilingual Puerto Ricans who were then questioned about the role-relationships of the speakers, the degrees of social distance between them, and the settings of the conversations. For several conversations, some questions concerned the speaker's educational and vocational status. However, the technique provided no direct measure of any meaning which the use of different languages had for the respondent. The subjects were asked only to consider whether changes in the language used would have made any difference, that is, whether the use of the "other" language would have been "as good" or "as nice" in the context of the conversation as the one which was used.

Method

In order to examine the extent to which the use of different languages is meaningful to bilinguals, two of the conversations used by Cooper *et al*. were re-recorded so as to vary the language patterns used by the speakers. The first conversation involved a boy calling a girl for a date. In the version used by Cooper *et al*. the boy talked with the girl and her mother in English, and the two women spoke to each other in Spanish. Four versions of this conversation were recorded: 1) all of the speakers used Spanish; 2) Cooper *et al*.'s original version; 3) all English; and 4) "mirror image" of the original (the boy and girl spoke Spanish with each other, and the mother spoke English with the boy and the girl). In the second conversation a woman and her son invited the son's friend to stay for dinner. The son and guest used English with each other in the original and the mother and guest employed Spanish. Again four versions were recorded: 1) all Spanish; 2) the original; 3) all English; and 4) the inverse of the original. The voices in the conversations were those of bilingual Puerto Ricans, and the four versions were produced from two recordings, one completely in English and the other in Spanish. The same actors were used for all of the recordings.

As the original conversations had been produced by Puerto

Ricans to appear similar to the kinds of conversations which actually occur among bilingual Puerto Ricans, it was predicted that other Puerto Ricans who speak both Spanish and English would find the second versions most natural. The fourth version was predicted to appear least natural, and the second and third versions were expected to seem less natural than the first but more natural than the fourth.

A multiple-choice questionnaire was constructed to assess the respondents' comprehension and interpretation of the stories. Five types of items appeared: those assessing the ability to identify 1) the role-relationships of the speakers (e.g., mother-son as opposed to husband-wife); 2) the setting of the conversations (where the conversation took place); 3) manifest content (the surface events of the story); 4) social or latent content (e.g., the occupational status of the speakers); and 5) the appropriateness of language usage. For the first three categories and for the first two items assessing comprehension of social content one option was correct. However, the last sets of items required that the respondents judge subjectively, and there was thus no "correct" answer. For example, the subjects were asked to estimate the length of time that the girl's family in the first conversation had lived in New York. The last or fifth type of item asked if the use of the other language would have made the conversation sound more natural or less natural or if it would have made no difference. Because the respondents were fully bilingual, any differences in their answers were predicted to be due to the language pattern used rather than to differences in ability to understand the languages.

The respondents were high school students, members of a Puerto Rican youth club organized to promote education and to develop community leaders. They were divided into four groups.[2] Each group heard one version of conversations I and II. After hearing a conversation twice they answered the items for that conversation. The respondents were reminded on the test sheet and by the examiner before each conversation was played that all speakers knew and were able to speak both Spanish and English. The date situation was presented first to each group. Group S heard the S. (Spanish) version of the conversations; Group E heard the E. or English version. Group O. heard the original and Group M. the "mirror" version. For each respondent, the percentage correct of each type of item with keyable answers was computed.

Results

The results obtained from the four groups show a remarkable homogeneity of response to the items which could be keyed as correct or incorrect. Table 1 shows the mean percentage scores of each group for these items. The groups' responses to the first conversation are the most consistent. Each group's responses to the first two types of items (Role Relations and Setting) were all 100% correct. The third set of items (Manifest Content) produced group means which varied between 88 and 89 percent. Responses to the fourth set of items scored as correct or incorrect (two Social Content items) varied more, but the differences among the groups, tested by analysis of variance, were not significant. These ranged from 66 to 84 percent. While the second conversation produced more varied responses to the above four types of items, the differences, tested by analysis of variance, were not significant.

Analyses of variance revealed significant differences, however, for some of the items requiring subjective evaluation (Tables 2 and 3). For the items displaying significant variation, a multiple-range analysis was subsequently performed in order to locate systematic response patterns. The significant items for the first conversation were as follows: #10 asked how long the girl's family had probably lived in New York; #11 asked the same question for the boy; #12 asked what kind of job the girl's father had; #16 asked if it would have sounded more natural, less natural, or the same if the boy and girl had talked together in the other language; and #17 asked the same question concerning the woman and the girl. For the second conversation the significant items were #13 and 14 which asked about language usage for the interaction between the woman and her guest and for the dialogue between the guest and his friend.

Conversation I

Reactions to item #10, Conversation I, associated the women's use of English with a longer residence in New York City. Group S. which heard the women speak Spanish to each other gave a significantly lower estimate than did either Groups E. or M., which heard the women use English with each other. Similarly, the use of Spanish between the boy and girl (item #11) was associated with a shorter residence in New York for the boy. The group which heard the "mirror" version, in which the boy and girl spoke Spanish to each other, gave significantly lower estimates than either the group hearing the original version or the group hearing the all English version.

Responses to item #12 indicated some relationship between the language used and inferred social status. As in item #11, version M provided the most difference from other groups, contrasting significantly with both versions S and O. The social status of the girl's family, as indicated by the father's profession, was estimated as significantly higher for the "mirror" recording in which the mother and daughter spoke English to each other, than for either the all Spanish or the original versions. The English version also yielded a higher occupation score than S and O, although the differences between it and the other scores are not significant.

With regard to the judged appropriateness of language use, the four groups also demonstrated systematically related opinions. All of the groups agreed that Spanish was "less natural" than English when used between the boy and his date (item 16). That is, their average scores were closer to the scores at the end of the scale indicating that Spanish was inappropriate. (The option "less natural" was scored as zero, "no difference" as one point, and "more natural" as two points.) This result and the fact that Group M's average rating was significantly different from that of the groups which heard the boy and girl use English with each other (O and E) support the original prediction that the mirror version would appear incongruent. Although the responses to the question of the appropriateness of the language used between the mother and the daughter suggest that the more natural medium is Spanish, the "incongruent" version, in which they used English, does not contrast significantly with any other version. Group M's average score indicates that Spanish is the correct language for the mother and daughter to use, but the score is not as different from the other groups' as the prediction of incongruence would suggest. Finally, the four groups showed no significant preferences for either Spanish or English as the appropriate language for use between the mother and boy.

Conversation II

Unlike the first conversation, the second produced significant variation only with regard to appropriateness of language use. Perhaps the topic of conversation in the second situation is less likely to arouse stereotyped reactions from bilingual Puerto Ricans. The conflict expressed in accepting the dinner invitation may be less culture-bound than the conflict in the first situation between the girl's desire to go out and her parents' rules. The respondents do express clear preferences for language appropriateness in this conversation, however. The significant contrasts among scores on item #13 indicate Spanish as the more natural variety for use between the guest and the mother. However, the son and his friend should use English with each other, according to the respondents (item #14). Again, contrary to prediction, responses to the language use items do not indicate that the "mirror" version of the conversation appears particularly "unnatural." The scores of the group hearing this version were consistent with the results for the significantly contrasting group responses, however.

Conclusions

Despite the apparently low number of items which produced statistically significant variation, the differences which did appear were systematically related to the shifts in the language which occurred in the conversations. The uniformity of the four groups' responses to the items which could be scored as correct or incorrect indicates that the differences for other items was not due to the students' ability to understand different amounts of Spanish or English, an inference supported by the findings of Cooper, Fowles, and Givner (1968). It is clear, however, that not all shifts in language pattern cause concomitant changes in bilinguals' perception of social meaning. But in some speech situations changes in the language spoken result in changed perceptions of the speech situation. The clearest result from the students' reactions is that these bilinguals appear to have internalized generally accepted norms regarding the appropriate use of Spanish and English. Although shifts in the use of the two languages in a given situation may not cause changes in the comprehension of the manifest content of the conversation, they may result in the feeling that the conversation has become more or less "natural."

Footnotes

[1] The research reported in this paper was supported by a grant from the U.S. Office of Education, Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was supported by a grant to the Project Director by the College Entrance Examination Board.

[2] Because of an unexpected conflict during the club meeting at which the tapes were to be played, the assignment of informants to groups was less than optimal. About half of the members present were taking a psychological inventory at the beginning of the meeting (these were primarily the high school senior class members). The remaining twenty-four members were divided equally and became groups I and II. Four late comers were directed to group II. Groups III and IV were recruited from members who arrived still later and from others who had taken the psychological inventory. All of the groups were, however, balanced with respect to the number of male and female respondents. Since there were no differences in the groups' ability to understand the conversations (cf. p.601), one might argue that lack of random selection did not bias the results obtained.

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Table 1

MEAN PERCENTAGE SCORES ON ITEM TYPES KEYED AS CORRECT OR INCORRECT

Group	Type of Items Role relations	Setting	Manifest content	Social content
	First Conversation (Date)			
S	100	100	88	75
O	100	100	89	84
E	100	100	89	77
M	100	100	88	66
	Second Conversation (Invitation)			
S	97	100	81	83
O	94	94	73	81
E	91	100	88	82
M	66	100	86	94

Table 2

ANALYSIS OF VARIANCE FOR ITEMS REQUIRING
SUBJECTIVE JUDGMENT: CONVERSATION I

Item No.	Source	df	MS	F
10	Treatments	3	4.13	3.50*
	Within	45	1.18	
11	Treatments	3	11.70	6.69**
	Within	45	1.75	
12	Treatments	3	2.46	3.97*
	Within	45	.62	
13	Treatments	3	.17	.23
	Within	45	.73	
14	Treatments	3	.18	.51
	Within	45	.35	
15	Treatments	3	.32	.76
	Within	45	.42	
16	Treatments	3	2.32	7.03**
	Within	45	.33	
17	Treatments	3	2.19	3.91*
	Within	45	.56	
18	Treatments	3	.67	1.45
	Within	45	.46	

*$p < .05$
**$p < .01$

Table 3

ANALYSIS OF VARIANCE FOR ITEMS REQUIRING SUBJECTIVE JUDGMENT: CONVERSATION II

Item	Source	df	MS	F
9	Treatments	3	.37	.73
	Within	45	.51	
10	Treatments	3	3.33	1.29
	Within	45	2.58	
11	Treatments	3	1.42	1.89
	Within	45	.75	
12	Treatments	3	.06	.65
	Within	45	.93	
13	Treatments	3	2.97	5.82**
	Within	45	.51	
14	Treatments	3	3.96	8.25**
	Within	45	.48	

**$p < .01$

Chapter
IV-5-a

THE EVALUATION OF LANGUAGE VARIETIES[1]

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The purpose of this study was to determine whether certain linguistically based differences in speech as observed by trained workers could also be observed by ordinary members of a bilingual community in the Greater New York area.

Method

Stimuli

Speech samples of four female Puerto Rican bilinguals were utilized in this experiment. The speakers lived in a neighborhood whose Spanish-English bilingualism has been intensively studied (Fishman, Cooper, Ma, et al., 1968). Two were chosen by trained linguists because they represented optimally contrastive verbal abilities in English and two because they represented optimally contrastive abilities in Spanish (Ma and Herasimchuk, 1968). These contrasts are in terms of verbal repertoire range (Gumperz, 1964). Speakers with a narrow range in English or in Spanish commanded a single casual style in that language. Speakers with a wide range commanded several styles, including more formal ones. The narrow range English speakers also spoke English with a decided Spanish accent. For each speaker two twenty-second segments of tape were chosen. One segment contained speech that was elicited in a formal manner (paragraph reading) and the other segment contained casual or "free" conversation. Thus there were eight tape segments in all, permitting a 2x2x2 analysis of variance design. The three factors to be studied were: language (English and Spanish), repertoire range (wide and narrow) and formality (casual and careful speech). The order of presentation for the segments was randomized. The segments were re-recorded and then spliced together on a single tape. Each segment was presented twice in succession before the next segment was presented.

Subjects

Twenty-two students at a public high school served as subjects. All of the students were speakers of Spanish and English and were members of the school's Puerto Rican youth group. Most subjects were American born or had lived for more than 10 years in the continental United States.

Rating Scale

A rating scale was administered to each of the respondents.[2] After listening to each segment the subjects were required to judge the highest grade in school completed by the speaker. In addition, for each segment, the subject was asked to rate the speech on fourteen bi-polar scales based upon Osgood's "semantic differential technique" (1964).

Investigators such as Osgood (1964), Lambert, Anisfeld and Yeni-Komshian (1965), Anisfeld and Lambert (1964), Lambert, Hodgson and Fillenbaum (1960) and Triandis, Loh and Levin (1966) have all found significant differences in respondents' attitudes towards various groups based upon replies to semantic differential scales. Lambert, Hodgson and Fillenbaum (1960) reported that subjects' perceptions of speakers changed when the latter changed from one dialect to another.

Obviously then the dialect differences themselves must have been discriminated by the subjects, whether or not they were fully aware of the differences. Thus, it seems clear that the semantic differential technique, when used to measure attitudinal changes in connection with speech differences, also indicates the absence or presence of perceived dialect (or language) differences on the part of respondents.

Three semantic differential factors have been empirically determined from numerous investigations of a large variety of stimuli, namely, 1) Evaluation, 2) Potency and 3) Activity. For each factor three of the total number of bi-polar dimensions have been found to be representative of that factor. For the Evaluative factor these are: nice - awful, pleasant - unpleasant and rough - smooth. For the Potency factor they are: strong - weak, masculine - feminine and serious - humorous. For the Activity factor they are: excitable - calm, fast - slow and fancy - plain. For the purposes of this study a fourth factor, Formality, was devised. The bi-polar dimensions used for this factor were: formal - informal, tense - relaxed, good - bad, soft - loud and careful - sloppy. Each dimension was presented on a seven-point bi-polar scale. One scale, for example, read: extremely good, quite good, slightly good, indifferent, slightly bad, quite bad, extremely bad. The order of the dimensions was randomized eight times (once for each segment of tape) and the subjects were required to rate each segment of tape on each dimension. Fourteen dimensions in all were utilized: 3 evaluative, 3 potency, 3 activity, and 5 formality.

Scoring and Data Analysis

Scoring was done on a seven-point basis corresponding to the seven term scale of each dimension. For the evaluative factor, for example, extremely nice, extremely pleasant, and extremely smooth were assigned the value "seven" while extremely awful, extremely unpleasant and extremely rough were assigned the score "one". Values in between "one" and "seven" were assigned to intermediate terms in accord with their distance from the extreme terms. For the educational level rating, the score used was the grade which the respondent circled as his choice for the speaker. For each subject, five scores per tape were obtained. They were: Evaluative, Potency, Activity, Formality and Educational Level. An analysis of variance was performed on each of these variables.

Results

Table 1 summarizes the five analyses of variance. These results show that one language was seen as being significantly more "active" than the other and one was seen as being significantly "better" than the other. An examination of the raw data means indicated that English was rated by most respondents as higher on both the Evaluative and Activity factors. Further, speakers in one range were perceived as having higher educational levels than speakers in the other range. An examination of the data showed that the wide range speakers were judged to have higher educational levels. Finally, the Formality scale yielded no significant results, probably because the dimensions used therein actually belonged in one or more of the other factors.

Conclusions

The results seem to indicate that linguistically based differences in bilingual repertoires do have interpretable correlates for the naive listener. These findings are in accord with others in the literature as reported earlier in this paper.

Table 1

ANALYSES OF VARIANCE OF RATINGS OF EIGHT STIMULUS TAPES

Source	df	ss	F
		Activity	
Language (A)	1	81.57	11.91**
Range (B)	1	.36	.06
Formality (C)	1	.82	.09
AxB	1	.01	.0009
AxC	1	1.68	.19
BxC	1	129.07	23.26**
AxBxC	1	49.86	5.59*
		Evaluative	
Language (A)	1	27.84	6.68*
Range (B)	1	.01	.00
Formality (C)	1	1.12	.06
AxB	1	.82	.05
AxC	1	.82	.12
BxC	1	2.02	.25
AxBxC	1	70.37	7.24*
		Potency	
Language (A)	1	2.50	.65
Range (B)	1	9.09	3.06
Formality (C)	1	.73	.16
AxB	1	88.84	21.51**
AxC	1	26.25	9.02**
BxC	1	82.97	42.55**
AxBxC	1	14.73	2.91

Table 1 continued

Source	df	ss	F
		Formality	
Language (A)	1	1.45	.13
Range (B)	1	8.21	1.07
Formality (C)	1	10.03	1.10
AxB	1	2.28	.20
AxC	1	.01	.00
BxC	1	16.56	1.81
AxBxC	1	52.35	3.40
		Level of Education	
Language (A)	1	32.82	1.37
Range (B)	1	32.82	6.76*
Formality (C)	1	23.27	3.51
AxB	1	16.56	1.14
AxC	1	127.84	24.76**
BxC	1	6.57	1.58
AxBxC	1	36.37	5.95*

Most interesting, however, is the fact that subjects were able to perceive different repertoire ranges. These are the first findings to provide experimental verification of the communicative function of differential repertoire ranges in speech. Further, they suggest that in previous studies which have utilized the semantic differential technique, some of the results obtained may also have reflected changes in repertoire rather than merely changes in variety or language. These earlier findings should certainly be re-examined with this thought in mind. Finally, this study implies that the linguistic variables initially used to determine differences in language, range and formality are, indeed, adequate in terms of their application to "real world" situations.

Footnotes

1. The research reported in this paper was supported under Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was supported by a grant to the Project Director by the College Entrance Examination Board.
2. The exact text and layout of the rating scales is shown in Appendix VIII-2 of Bilingualism in the Barrio, J. A. Fishman, R. L. Cooper, R. Ma, et al. Final Report under Contract No. OEC-1-7-062817-0297. New York, Yeshiva University, 1968.

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Chapter
IV-5-b

SOME MEASURES OF THE INTERACTION BETWEEN LANGUAGE, DOMAIN AND SEMANTIC DIMENSION IN BILINGUALS[1]

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and
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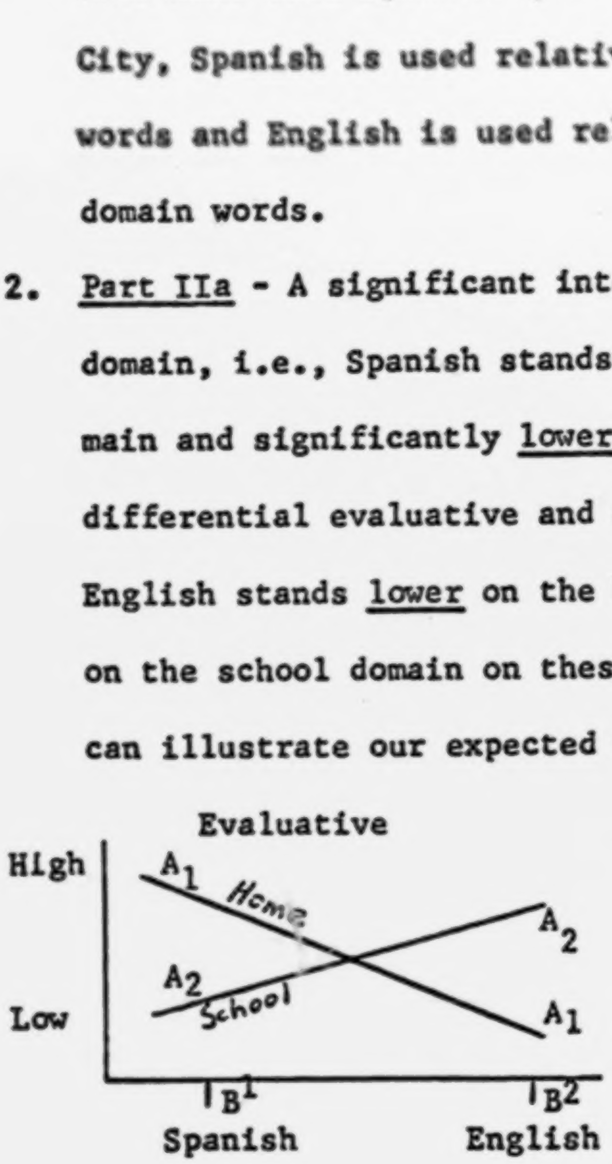
There is currently a growing need for contextualized measures of bilingualism that are not as susceptible to respondent bias as are census claims or usage ratings. Measures of bilingualism that are both contextualized as well as relatively bias-free are needed in order to validate and interrelate such constructs as domain and value cluster (Fishman, in press), as well as in order to refine the diglossic notion of differential functional allocation of languages, which is so basic to sociolinguistics more generally. A method that shows promise for determining which language or speech variety is predominantly viewed as congruent with which societal domain or which value cluster is Osgood's semantic differential (Osgood, 1957). The present paper utilizes semantic differential scales in these very connections and compares the finding obtained from such scales to findings derived from other contextualized measures of bilingualism.

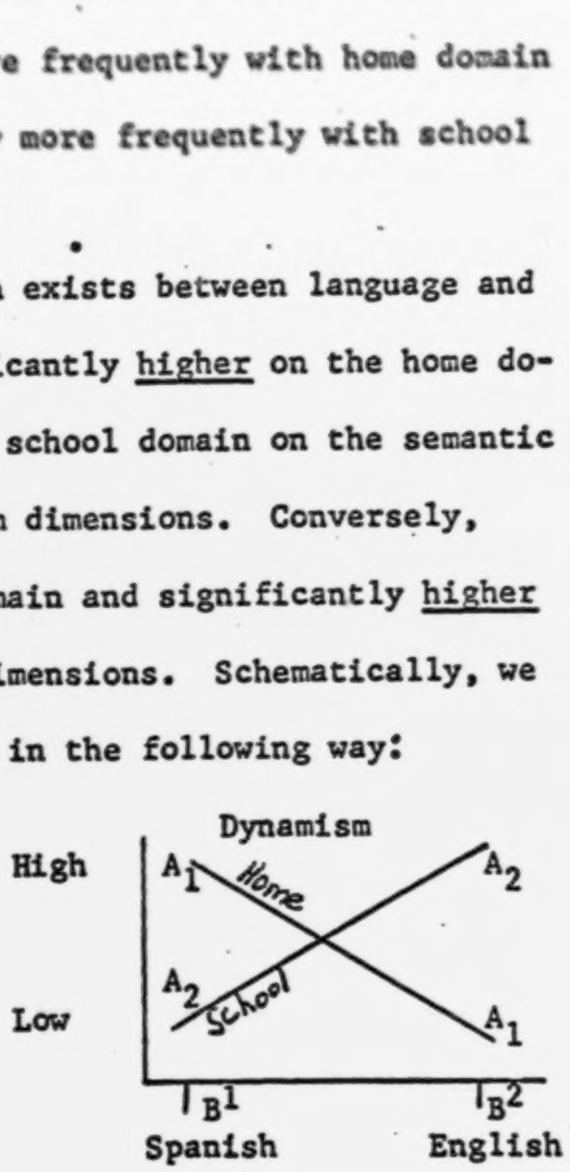
Osgood has taken his lead for measuring meaning from factorial studies of traits, abilities and attitudes. Underlying the semantic differential as a measuring instrument is the basic assumption that any term or concept is locatable in a multidimensional "semantic space" analagous to the description of a color in terms of its hue, brightness, and saturation.

In order to test the "marriage" of the semantic differential with the sociolinguistic construct of language and domain an analysis of variance design will be utilized to determine the significance of the main effects of language and domain as well as the significance of their interaction.

Our hypotheses are as follows:

1. *Part I* and *Part III* - While significant overall differences between *languages* may exist with respect to *absolute measures* of frequency of language use in bilingual populations, significant *domain* differences exist with respect to *relative measures* of frequency of language use. Specifically, while English may, on the whole, be used more than Spanish by Puerto Rican adolescents in New York City, Spanish is used relatively more frequently with home domain words and English is used relatively more frequently with school domain words.
2. *Part IIa* - A significant interaction exists between language and domain, i.e., Spanish stands significantly *higher* on the home domain and significantly *lower* on the school domain on the semantic differential evaluative and dynamism dimensions. Conversely, English stands *lower* on the home domain and significantly *higher* on the school domain on these two dimensions. Schematically, we can illustrate our expected results in the following way:





3. Part IIb - The home domain is rated more positively than the school domain on the evaluative dimension, while on the dynamism dimension the school domain is rated more positively than the home domain.

Hypothesis 1 relates to Parts I and III of this three part study. Its rationale is derived from reports of various diglossic communities which imply that one language is primarily associated with home and family whereas another is primarily associated with education and other High Culture pursuits. The distinction between absolute and relative measures of bilingualism in diglossic settings is primarily a methodological one. Relative measures can not directly reveal overall language differences, as can absolute measures. However, both types of measures can reveal language by domain interaction and, therefore, their results should be in harmony with each other if the measures utilized are valid.

Hypotheses 2 and 3 relate to Part II of this study. Its rationale derives directly from Fishman's theory that different value clusters are enacted in and serve to differentiate between the domains of societal interaction. Fishman hypothesizes that fewer value clusters than domains are needed in the analysis of diglossic speech communities since most value clusters subsume several domains. The semantic differential evaluative dimension is assumed to be an approximation of Fishman's intimacy value cluster. The semantic differential dynamism dimension is assumed to be an approximation of Fishman's status stressing value cluster. Intimacy (Evaluative Dimension) is assumed to be more closely related to home and to Spanish whereas status (Dynamism Dimension) is assumed to be more closely related to school and to English in accord with Fishman's earlier discussion. As a result we expect language and domain to interact significantly on each of these dimensions if we can first successfully demonstrate that home is indeed more related to the evaluative dimension and that school is indeed more related to the dynamism dimension.

Method[2]

Three different instruments (designated as Part I, Part II and Part III) were administered in the following order.

Part I. A rating scale designed by Cooper and Greenfield (1968) to determine the absolute frequency with which Spanish and English words are encountered was used in connection with the domain of school and the domain of home. From the 45 English words to be rated on a seven-point scale in connection with how often they were heard or said, 16 were selected to be scored and analyzed for our purposes. Of these 16 words, 8 represented the home domain and 8 represented the school domain.* The same 45 words were subsequently presented for rating in Spanish translation and in a randomized order.

Part II. The 16 words which represented the home and school domains were presented as stimulus words to be rated on 12 bipolar semantic differential scales. For the purpose of our study we used the 6 highest loading scales on Osgood's evaluative dimension as well as the 3 top loading scales from his power dimension and the 3 top loading scales from his activity dimension. The 3 items from the power dimension and the 3 items from the activity dimension were combined (in accord with a suggestion from Osgood) into one factor labeled the dynamism dimension.

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*In a pilot study 19 members of an Aspira Club in a New York City High School rated these 16 words from a list of 45 words as being the most unambiguous, both in Spanish and in English, with respect to the domains of school and home. The selected home words were: family, father, house, dish, salt, soup, room, parents and their Spanish translations. The selected school words were: school, chalk, lesson, teacher, student, blackboard, history, science and their Spanish translations.

Each of the 16 stimulus words (8 representing the home domain and 8 representing the school domain) was presented at the top of a different page containing the 12 bipolar scales (6 from the evaluative dimension and 6 from the dynamism dimension). Each S rated each word on each bipolar scale, thus performing 16x12 or 192 ratings in all. To control for possible boredom or fatigue in a task of this length, the 8 home domain words and the 8 school domain words were alternated with respect to order of presentation. To control for a possible position bias the evaluative bipolar scales and the dynamism bipolar scales were also alternated on each page. Although separate Spanish and English versions of Part II were utilized with different groups of Ss, the instructions were not translated and were presented only in English to all subjects.

Part III. A 5-point rating scale was designed to determine relative frequency of use of the 16 words utilized in Part I and Part II. The English and Spanish word-pairs were presented together and Ss were asked to determine whether or not they heard or used the English word more than the Spanish equivalent, whether or not they used the English word and the Spanish word equally often, or whether or not they used the Spanish word more than its English counterpart. The words were presented in the same order as in the semantic differential study (Part II), i.e., school words and home words alternately.

Subjects

The subjects were 46 Puerto Rican high school students from Aspira Clubs in Brooklyn, New York.[3] Membership in these clubs was assumed to be indicative of average or better school performance, thus ruling out reading problems among our Ss.

Years spent in the U.S.A. ranged from 1 year to 19 years with the median years spent in the U.S.A. being 12. Of the 46 subjects in the study, 13 were male and 33 were female. However, of the 36 who completed the study, only 4 were male. Two males did Part II in Spanish while the other two did Part II in English.

Results

Part I. Table 1 reveals the main effect of language (B) to be significant at the .01 level in accord with hypothesis 1. The English word list in the absolute measure of language use yielded a significantly higher mean frequency than did the translation list of Spanish words. Neither years in the United States per se nor domain per se were significant main effects. The interaction between years in the United States and absolute frequency of language use (AxB) was significant at the .01 level.

As Figure I indicates, those subjects who had been in the U.S. for 11 years or less claimed a mean frequency of use which is approximately the same for the English list and for the Spanish list of words. However, for those subjects who had been in the U.S. for 12 or more years, there was a significantly higher mean frequency of use in English than in Spanish.

The interaction between language and domain (BxC) was also significant at the .01 level. As Figure II indicates the home domain remained relatively stable on both the English and Spanish set of words with respect to frequency of use. However, in the school domain there was a significantly higher mean frequency of claimed use in English than in Spanish.

TABLE 1. ANALYSIS OF VARIANCE FOR ABSOLUTE FREQUENCY OF USE

Source	SS	df	MSS	F
Total	24325.914	183	---	
Between subjects	12724.414	45	---	
Years in U.S. (A)	15.848	1	15.848	< 1
Sub w Yr (E_1)	12708.566	44	288.830	
Within subjects	11601.500	138	---	
Lang (B)	1140.021	1	1140.021	17.37**
Domain (C)	4.261	1	4.261	< 1
Lang x Dom (BxC)	665.759	1	665.759	10.14**
Yrs x Lang (AxB)	704.347	1	704.347	10.73**
Yrs x Dom (AxC)	420.020	1	420.020	6.40*
Yrs x Lang x Dom (AxBxC)	4.262	1	4.262	< 1
Groups w Sub (E_2)	8662.830	132	65.627	

* $p < .05$
**$p < .01$

FIGURE I

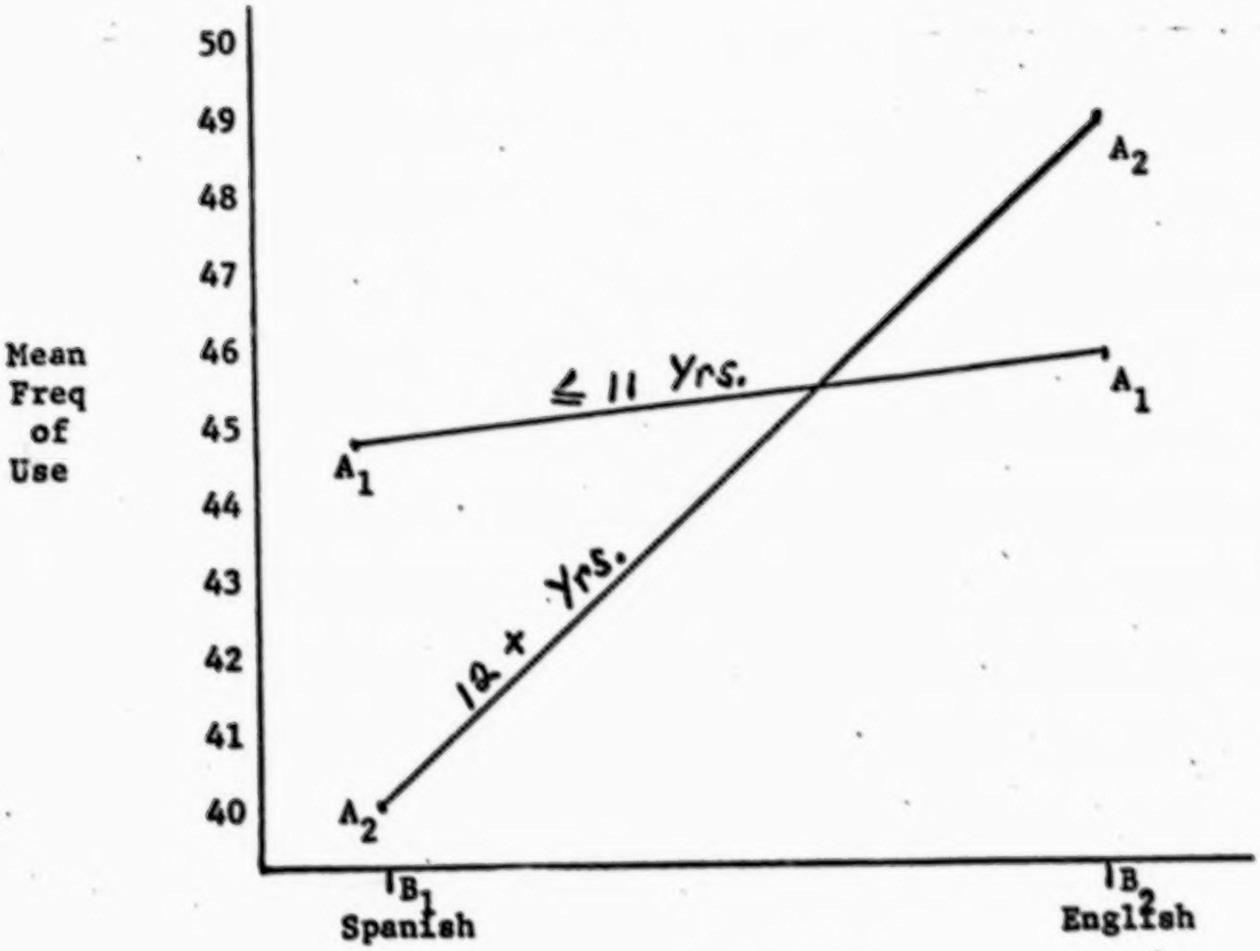
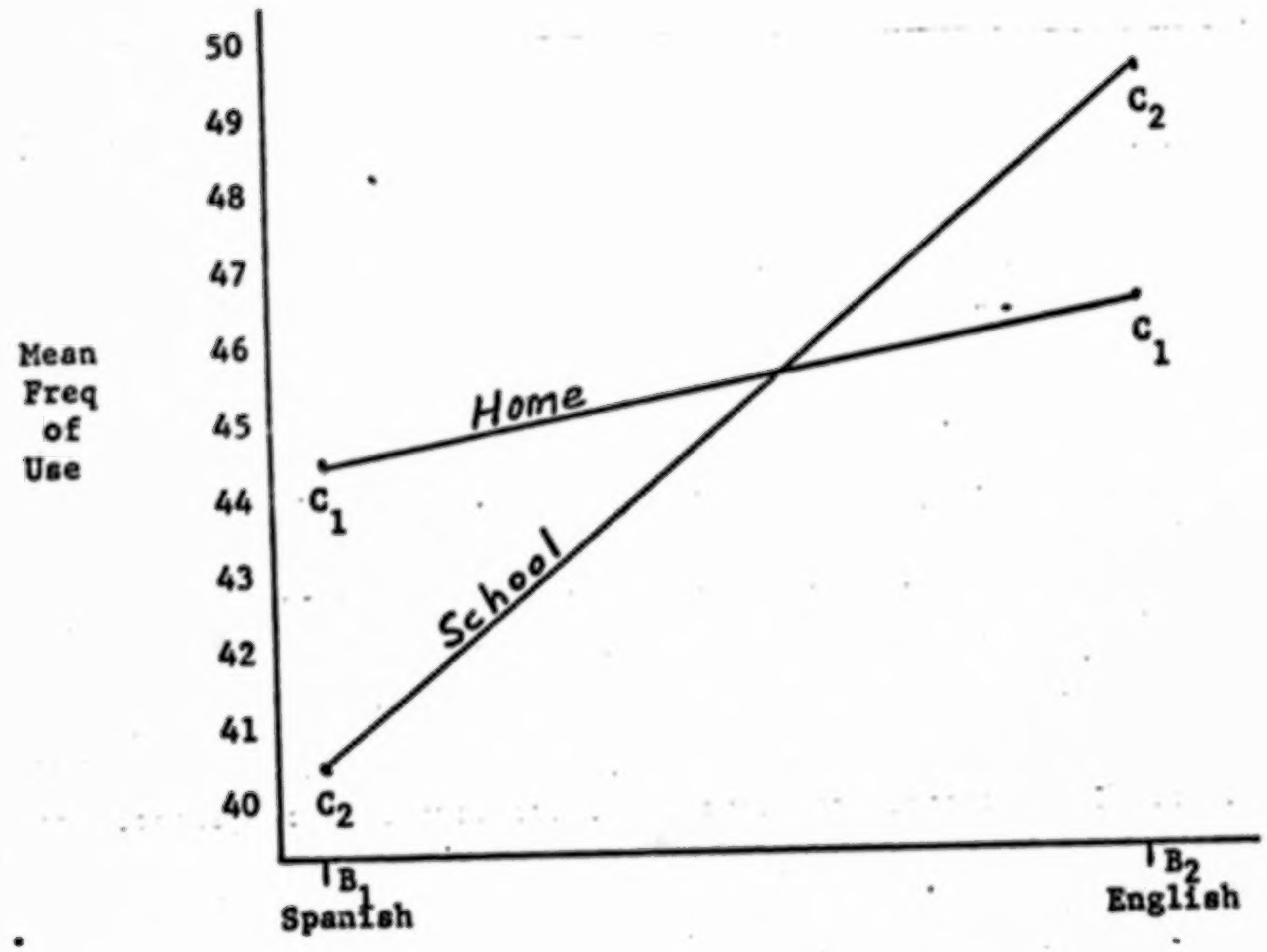

Mean Freq of Use
50
49
48
47
46
45
44
43
42
41
40
A2
A1
≤ 11 Yrs.
A1
12 + Yrs.
A2
B1
Spanish
B2
English

FIGURE II


Mean Freq of Use
50
49
48
47
46
45
44
43
42
41
40
Home
School
C1
C2
C2
C1
B1
Spanish
B2
English

The interaction between years in the United States and domain (AxC) was also significant ($p < .05$) but does not pertain to our current interest.

Part III. As Table 2 reveals the instrument designed to measure relative frequency of use yielded a significant domain (B) difference at the .01 level. This finding is also in accord with hypothesis 1 since a significant domain effect in a relative use measure is equivalent to a significant language x domain interaction in an absolute use measure.

The home domain words were claimed more in Spanish than in English ($\bar{x} = 21.3$), while the school domain words were claimed more in English than in Spanish ($\bar{x} = 15.6$).

Part II. Hypothesis 2 posits a significant interaction between domain and language on the evaluative and dynamism dimension. Tables 3 and 4 indicate that this hypothesis was not confirmed. However, the analysis of variance of the semantic differential ratings reveal that the main effect of domain (C) was significant on the evaluative dimension at the .05 level and significant at the .01 level on the dynamism dimension. On the evaluative dimension, the home domain words had a mean score of 124.2 (more positive) while the school domain had a mean score of 153.5 (less positive). On the dynamism dimension, the school domain had a mean score of 145.3 (more positive) while the home domain had a mean score of 155.0 (less positive). Hypothesis 3 is, therefore, fully confirmed.

Conclusions

This study has confirmed 2 of its 3 initial hypotheses.

a) An absolute rating of frequency of language use yielded a

TABLE 2. ANALYSIS OF VARIANCE FOR RELATIVE FREQUENCY OF USE

Source	SS	df	MSS	F
Total	4454.990	91	---	---
Between subjects	2987.490	45	66.388	---
Yrs. in U.S. (A)	133.923	1	133.923	2.02
E_1	2853.567	44	64.853	
Within subjects	1467.500	46	---	---
Domain (B)	740.446	1	740.446	45.73**
Yrs. x Domain (AxB)	14.880	1	14.880	<1
E_2	712.340	44	16.189	

**$p < .01$

TABLE 3. ANALYSIS OF VARIANCE:
SEMANTIC DIFFERENTIAL (EVALUATIVE DIMENSION)

Source	SS	df	MSS	F
Total	72327.653	71	---	
Between subjects	49054.153	35	---	
Yrs. in U.S. (A)	105.124	1	105.124	<1
Lang (B)	1144.545	1	1144.545	<1
Yrs. x Lang (AxB)	1056.183	1	1056.183	<1
E_1	46748.301	32	1460.884	
Within subjects	23273.500	36	---	
Domain (C)	13695.124	1	1369.124	5.13*
Domain x Yrs. (AxC)	136.125	1	136.125	<1
Domain x Lang (BxC)	910.716	1	910.716	3.41
Domain x Lang x Yrs. (AxBxC)	0.000	1	0.000	<1
E_2	8531.537	32	266.610	

*$p < .05$

TABLE 4. ANALYSIS OF VARIANCE:
SEMANTIC DIFFERENTIAL (DYNAMISM DIMENSION)

Source	SS	df	MSS	F
Total	58026.445	71	---	
Between subjects	48100.445	35	---	
Yrs. in U.S. (A)	1073.389	1	1073.389	1
Lang (B)	80.970	1	80.970	1
Yrs. x Lang (AxB)	114.056	1	114.056	1
E_1	46832.030	32	1463.500	
Within subjects	9926.000	36	---	
Domain (C)	2069.389	1	2069.389	9.09**
Domain x Yrs. (AxC)	256.888	1	256.888	1.12
Domain x Lang (BxC)	49.525	1	49.525	1
Domain x Lang x Yrs. (AxBxC)	265.435	1	265.435	1.16
E_2	7284.763	32	227.648	

**p .01

significant overall difference between English and Spanish (English words being claimed more frequently than Spanish words) as well as a significant language by domain interaction between home domain words and school domain words.

b) A relative rating of frequency of language use yielded a significant overall domain difference between home words and school words. Because of the nature of this instrument this was equivalent to a significant domain by language interaction. Thus, both rating scales agree that Spanish and English were reported as being differentially domain related.

c) Domain differences also appeared on two major semantic differential dimensions. Home words were rated more positive on the evaluative dimension and school words were rated more positive on the dynamism dimension. This confirms Fishman's hypothesis of congruence between domains of societal interaction and the major value clusters that subsume these domains.

d) We failed to find the hypothesized language by domain interaction on each of the semantic differential dimensions. Nor was there a significant language difference on either of these dimensions.

All in all, we have demonstrated that value clusters are differentially domain related and that the languages of bilinguals are differentially domain related. We have failed to link these two findings to each other (as would have been the case had we been able to show that language and domain both interacted significantly and oppositely in two different value dimensions) and, therefore, this task remains for future research.

Footnotes

1. The research reported in this paper was supported under DHEW Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was made possible by a grant to the Project Director by the College Entrance Examination Board.
2. All instruments utilized in Parts I, II and III of this study are shown in full in Appendix VIII-2 of Fishman, J. A., R. L. Cooper, Roxana Ma, *et al*. *Bilingualism in the Barrio*. Final Report under Contract No. OEC-1-7-062817-0297. New York, Yeshiva University, 1968.
3. Because of lack of time, Part II was completed by only 36 *S*s. Of these, 22 took Part II in English while 14 took it in Spanish.

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Part V

LINGUISTICALLY-ORIENTED STUDIES

Chapter
V-1

THE LINGUISTIC DIMENSIONS OF A BILINGUAL NEIGHBORHOOD

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THE LINGUISTIC DIMENSIONS OF A BILINGUAL NEIGHBORHOOD

1. Linguistic Diversity in Bilingual Behavior

This report is primarily concerned with the structure of stylistic variation of Spanish and English in the linguistic behavior of a Puerto Rican bilingual community located within the greater New York metropolitan area. The theoretical and methodological orientation of this research project draws heavily on recent work by Fishman, Labov and Gumperz in their investigations of linguistic diversity within various speech communities. A common theme, and one which is fundamental to our study, runs through these investigations, namely, that variation in linguistic behavior is patterned variation, a lawful behavior whose manifestation reflects and accompanies other social patterns within the speech community itself. Whether one is dealing with "monolingual" or "multilingual" communities, the conclusions are similar: choice among linguistic alternatives (which can range anywhere from choosing between two "equivalent" pronunciations of the same word to choosing between two or more different languages to express an idea) is largely conditioned by a complex interrelationship of factors present in the social organization of the community and in the social setting of the speech act. The key concepts of this sociolinguistic orientation are diglossia (Ferguson, 1959), language domain (Fishman, 1964), linguistic repertoire (Gumperz, 1965), communicative competence (Hymes, 1966) and linguistic variable (Fischer, 1959; Labov, 1964b, 1965a). A discussion of these general notions will help to place our study in proper sociolinguistic perspective.

Ferguson's article was one of the first to delineate the pattern of a complementary distribution of usage between the two languages of bilingual (and bidialectal) communities. This distribution is associated with complementary sets of attitudes and cultural values held by members of these communities. Choice of language is a function of the set of values (designated as "high" and "low") and social situations operating in any given social interaction such that one language is typically considered more appropriate for certain kinds of linguistic behavior (be it written or oral) than the other, and vice versa. In addition, he set forth a typological description of the linguistic features which respectively marked the H and L language varieties. Other studies illustrating this diglossic relationship have been carried out for such language pairs as French/Haitian Creole (Stewart, 1962) and Spanish/Guaraní (Rubin, 1962). Even though Stewart's study dealt with the formal/informal axis whereas Rubin plotted usage according to the power/solidarity dimension, these studies succinctly illustrate the basic functional interrelationship holding between usage of a language and its social value.

Fishman (1964, 1965, 1968) has developed this concept further by formulating a hierarchical set of sociological constructs which relate language choice behavior to domains of social interaction, such as the family, neighborhood, and occupational spheres of activity. Where the complementary, non-competing sets of "value clusters" are each associated with a different language or language variety, and where the value clusters are realized in different sets of domains, the maintenance of stable intra-group bilingualism becomes possible. The intersection of language usage and domains of social interaction forms a matrix called a "dominance configuration." The value of this approach is that it permits one both to assess the degree of bilingual usage within the community and to plot the direction of any possible trend from bilingualism to monolingualism. We shall return to this point of view later on in our discussion.

The next two concepts, linguistic repertoire and communicative competence, are closely related. Gumperz' work on small group interaction in diverse speech communities has emphasized the need to recognize that speakers choose from a range of linguistic options to express their communicative needs. The totality of these available linguistic forms can be considered as a verbal repertoire and may consist of a range of different speech styles (for monolingual groups) or separate languages (for multilingual groups). Each of these "varieties" (to use a more neutral term) is associated and used, through community-known rules of appropriateness, with specifiable social relationships and communication networks. Bilingualism per se is merely a more salient extension of the general phenomenon of variation in code repertoire and code switching, so that bilinguals switch languages for many of the same reasons that monolinguals shift styles (Gumperz, 1967). The question is the same for mono- or bilingual communities: How do the language varieties function to fulfill the total range of different communicative needs of the society?

Hymes emphatically states the case for the functional separation of diverse codes:

> "No normal person and no normal community is limited in repertoire to a single variety of code, to an unchanging monotony which would preclude the possibility of indicating respect, insolence, mock seriousness, humor, role distance, etc., by switching from one code variety to another." (1967: 9)

He has argued that a native speaker's ability to know when to use which variety can be regarded as his communicative competence (or performance competence). Rules of usage are in some sense comparable then to the rules of grammar. He thereby urges linguists to give more serious consideration to the role which factors in the social setting play as determinants of linguistic behavior.

Approaching the same conclusions from a slightly different point of view, Labov's work has consistently sought a social explanation for the phenomenon of "free variation" and its importance as a predictor of linguistic change. With the exception of the pioneering article by Fischer, structural linguists had largely ignored the problem of variation. This was because they accepted de Saussure's theoretical dictum of the fundamental separation between langue and parole (more recently reiterated by Chomsky as the distinction between "competence" and "performance"), namely, that there is one underlying abstract linguistic structure which exists and coheres in spite of the ephemeral fluctuations in usage which speakers of a language bring to it. It is this inherent idealized structure (corresponding to an ideally homogeneous speech community) which the science of linguistics must seek to characterize (Chomsky, 1965: 9). Labov and Hymes have both questioned the narrow scope of the structuralists and noted that widespread linguistic variation is not completely random, not on the individual level and much less so in the community context. Labov dismisses the simplifying assumption that linguistic communities are homogeneous. Linguistic divergence and change have long been studied as separate sub-disciplines, namely, dialectology and historical linguistics. Labov has contributed a third dimension by looking into the dynamics of linguistic change, not just the static results of change. What is the genesis of such change? Are changes due only to pressures and to shifting relationships within the linguistic systems themselves (Martinet, 1965) and to no outside factors? Are speakers of a language merely literal mouthpieces of their languages, or do they play an active (if unconscious) role in guiding the direction of linguistic change? By systematically relating the quantitative data of linguistic variants on the one hand to stylistic and sociological variation on the other, Labov has provided a model of the sociolinguistic structure of language change which is at once explanatory and predictive (1965a, 1965b). To Labov is due the credit for introducing and developing so thoroughly the concept of "linguistic variable" as the major linguistic unit by which the sociolinguistic structure of a language can be studied and measured. His earlier work on phonological variation showed that the traditional analytic units of "phone", "allophone" and "phoneme" were inadequate to explain the patterned phonological variations found both within and between speakers, since these patterns cut across both phonetic and phonemic categories, thus defying definition. He posited a new non-discrete categorial unit, the "linguistic variable" (1964b). This unit had scale-like properties, such that a distribution of its variants could be plotted as points on a scale, these points being correlatable to such other axes of variation as stylistic variation and social stratification. Labov's theoretical assumptions and methodological orientation have been adopted quite wholly in our study, as will be seen later.

This brief review points out that all of these investigators, whatever their methodological differences, agree in one basic theoretical premise: they take it as given that speakers interact in speech communities of varying degrees of linguistic diversity and social complexity. Whether monolingual or multilingual, these communities are characterized by distinguishable speech varieties such that their distribution of usage is intermeshed with and signaled by various factors in the social communicative systems of the community.

1.1. Bilingualism: Norm vs. Variation

In light of the above discussion on code diversification, how have past linguistic studies treated bilingualism as a form of social behavior? The emphasis in most studies (Weinreich, 1953; Haugen, 1954; Mackey, 1961, 1962) has been on the purely linguistic aspects of the problem, dealing primarily with the analysis of the structural perturbations (phonological, grammatical, and lexical) which one language causes in another when the two of them come into contact. The usual working assumption has been to treat one language as primary or P (i.e., the mother tongue) and the other as secondary or S (the foreign language) and to focus on those sub-systems within P which undergo influence from increasing exposure to S. Although bidirectional influence has also been recognized (see Weinreich, 1953; Diebold, 1961), the usual studies deal with one-way influences from S into P (for example, see Haugen, 1953; Seaman, 1966; Kriedler, 1957). The subsystems are affected due to processes which are strictly linguistic in nature, involving interlingual identification of "similar" elements, resulting in the phenomenon known as "structural interference." Interference has been variously defined as:

> "The use of elements of one language in speaking or writing another." (Mackey, 1965: 239)

> "Instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language." (Weinreich, 1953: 1)

In keeping with the traditional structuralist bias regarding the autonomy of linguistic structure, interference studies have not been primarily concerned with the community context of bilingualism but have assumed that the two ideal linguistic systems must correspond to two ideally homogeneous speech populations. Although it was early recognized by Weinreich that extra-linguistic factors (e.g., psychological and socio-cultural) do play a definite role in the effects which bilingualism has on a person's speech habits, linguists have been content to locate and describe the purely linguistic aspects and to view the others as merely reflections of degree of exposure of P to S. However, recent studies of multilingual communities provide evidence that several past assumptions about language contact are possibly incorrect or at best oversimplified. For example, it had been assumed that members of one speech community automatically have access to the linguistic norms of the other speech community and that they usually attempt to apply these norms. In fact, however, within a large stable bilingual community like the New York City Puerto Rican community, it is more likely the case that bilinguals interact and communicate with each other, using both languages, far more frequently than they interact and communicate with members of the surrounding monolingual community. In such a community, speakers generate their own bilingual norms of correctness which may differ from the monolingual norms, particularly where there is a lack of reinforcement of these monolingual norms (Gumperz, 1967; Ervin-Tripp, 1967). It has also been observed that, given certain social conditions, speakers may choose not to apply the norms even though they may be aware of them. If this is so, then interference per se can no longer be assumed to be either constant or uniform through the bilingual community. Mackey (1962) has pointed out that

> "In the speech of bilinguals, the pattern and amount of interference is not the same at all times and under all circumstances. It may vary with the medium (reading vs. speaking), the style (narrative vs. conversational purpose of the interaction), the register (social role of the speaker), and the context (topic of the discourse)." (69) ...In the last analysis, interference varies from text to text." (70).

In any meaningful analysis and measurement of bilingual interference he concludes that it is necessary to know

> "...not only the sort of interference but also the extent of each interference, quantify it, and find out where it predominates." (82)

Thus interference is a continuum and varies with other factors in the speech situation. Some of the most interesting sociolinguistically oriented studies are those of Ervin-Tripp on Japanese-American bilinguals (1964, 1967). She shows that co-variation of language, topic and listener have rather startling effects on the linguistic structures themselves, and that phonological and syntactic fluency to discuss a particular topic in a particular language depend on whether the topic, language and listener constitute a congruent or admissible combination. This suggests very clearly that ability to talk about typically American content and ideas may be part of the competence to be acquired along with the English language, i.e., that linguistic competence is itself dependent upon social contextualization.

If we are to study adequately the speech patterns of any bilingual community, we must go beyond merely describing how well speakers know the linguistic norms of both languages, i.e., their abstract linguistic competence. What they know is only important in relation to how they use it. Many bilinguals speak and use standard as well as non-standard varieties of both languages. The more significant fact is their sociolinguistic or communicative competence (also considered to be a single set of patterned speech habits) for knowing how and when to use whatever varieties of each language they may command (Hymes, 1967; Fishman, 1968). It is only after we have understood the reasons (both social and psychological) for the existence, extent, and diversity of linguistic varieties that we can proceed to study the exact nature of the linguistic differences which characterize these varieties. A study of code diversity is thus one of the major tasks of a sociolinguistically oriented approach to bilingualism. Such an approach does not make an *a priori* assumption that these linguistic varieties necessarily conform to the abstract "standard" norms of either "language." Nor does such an approach automatically consider interference phenomena as always and only "deviations" from these norms. Sometimes interference can be considered as a functional variety or norm in and of itself. Haugen has admitted that "if it [interference] is frequently repeated, it may itself become part of the norm " (1957: 777). Thus the linguistic norms of any speech community must always be empirically (and quantitatively) discovered for that community.

1.2. Intragroup Bilingualism and Degrees of Bilingual Usage

As we have noted earlier, the languages and language varieties of stable bilingual communities have been found to co-exist in a relation of diglossia. If a functional separation of languages is not maintained, then intragroup bilingualism is likely to die out. In the past, this has been the case with numerous immigrant languages in America.

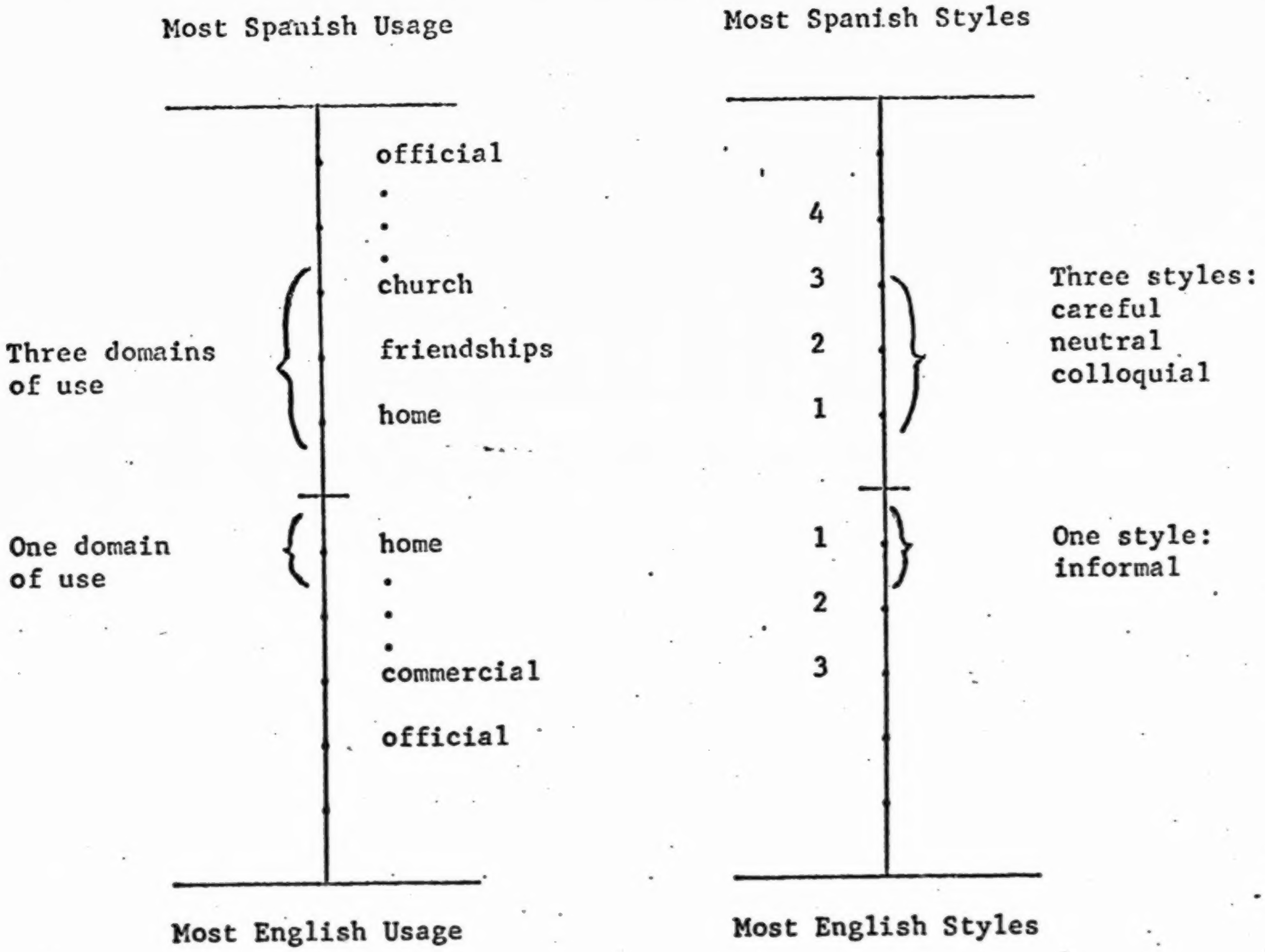
As new cultural patterns have to be assimilated and learned, a linguistic means for expressing these new ways and values has to be found. The first stage is usually extensive borrowing on the lexical level from the dominant language, English; subsequent stages affect higher orders of complexity, such as the grammatical and semantic levels. Borrowing, or linguistic acculturation, is a three-stage cycle which Haugen has characterized as code-switching, interference, and integration (1954). This cyclic process continues in direct proportion to the shift in cultural context which the immigrant community continually experiences. A period of widespread intergroup plus intragroup bilingualism reflects the ongoing acculturation process. Haugen's early (1953) study is a massive documentation of the results which linguistic acculturation and shift have produced in the Norwegian language in America. Simultaneously with progressing acculturation, the immigrant language becomes more and more restricted in its social usage and functions. If assimilation becomes so complete as to render the mother language no longer useful in any contrastive functions, a language shift will occur and bilingualism may then cease to exist at the community level, although it may still be retained on an individual or small group basis. Fishman has pointed out that, to the extent that immigrant languages have survived and retained some unique functions in American life, this has been largely a result of institutionalized intragroup forces at work, such as religious organizations, private bilingual schools, bilingual mass media, and social-cultural community programs, all of which emphasize the traditional and ethnic values associated with the immigrant languages. Language choice (or intragroup bilingualism) often persists long after the requirements of mutual intelligibility (or intergroup bilingualism) have been met precisely because languages are in fact not functionally "equivalent" to their speakers.

Of course, this is because bilingualism as such is never only "native-like" control of both languages (Bloomfield's definition) nor is it only a minimum proficiency in the other language (what Diebold calls "incipient" bilingualism). Bilingualism is a continuum between these two extremes, and one can properly speak about degrees of bilingual usage within a community corresponding to speakers' differing linguistic proficiency and social usage of the two languages. To ask the question "which language is dominant?" is to look for mere dichotomy where a much more complex situation exists. We have to modify the question to "...dominant with respect to whom and when?". If it is true that choice of language or language variety and type of social situation are interdependent, then we must look for what Fishman calls the "domain appropriateness" of each variety. In our community, the domains of family and neighborhood friendships create social pressures which tend to work in favor of maintaining Spanish, whereas other domains such as public education, occupational activity and public mass media create favorable contexts for English. One Spanish variety may be dominant in an informal conversation between friends, another in an interview with a prospective employer; or an English variety may dominate in formal conversations with co-workers, etc. Thus a multiplicity of social and linguistic factors must be considered to arrive at a total picture of language usage and language choice; only from this total configuration can the degree of bilingual usage be described and measured. As we mentioned earlier, the degree to which this "dominance configuration" changes over time should reflect the changing social functions of the language varieties.

1.3. Stylistic Variation as a Measure of Degree of Bilingualism

What correlations exist between the degrees of bilingualism among various Puerto Rican speakers and the linguistic varieties of Spanish and English which they use? We have contended that, if one were to sample the actual range of social situations involving language choice, one would find a corresponding range of linguistic varieties and that these two repertoires covary. It is therefore reasonable to assume that, as changes occur in the patterns of language usage and choice, shifts will likewise occur in the verbal repertoire. In other words, range of bilingual usage (as measured by domain analysis) will correlate with a range of stylistic variation. We would expect that speakers who differ in degree of bilingual usage also differ in the linguistic varieties they control. If both are indeed true scales, we will find correlations between corresponding points between these scales. To put it more succinctly, our hypothesis is that speakers who show greater sensitivity to Spanish than to English, i.e., use Spanish more frequently over a wider range of social interactions, will reflect this fact linguistically by having more varieties in Spanish than in English. Similarly, the reverse should hold for speakers who are closer on the bilingualism scale to English usage and dominance. We can depict this relationship in Figure 1. Our general problem is to empirically test this hypothesis by describing in detail the respective repertoires involved.

Figure 1. Correlation Between Repertoire of Language Choice Domains and Linguistic Repertoire


Most Spanish Usage
official
church
friendships
home
Three domains of use
home
commercial
official
One domain of use
Most English Usage
Most Spanish Styles
4
3
2
1
Three styles: careful neutral colloquial
1
2
3
One style: informal
Most English Styles

2. The Puerto Rican Speech Community

We turn now to a background sketch of the community itself. Even though the highmark of Puerto Rican migration into New York City took place in the mid-fifties, the community still continues to expand at an average annual rate of 16,700.[1] The result, in the Puerto Rican case, is that there is a reversal of the usual pattern among immigrant populations of a progressive decline in the number of non-English speaking monolinguals residing in the U.S. This is true in spite of the fact that English had been used as the language of instruction throughout Puerto Rico until recently. Due to many insufficiencies in the educational system on the island, many immigrants have only a slight or at best imperfect grasp of the English language, particularly those from the rural areas (who, incidentally, form a good percentage of our subjects, and, in effect, are Spanish monolinguals). Spanish values and contacts are continually reinforced, since travel back and forth between the Island and the City is fairly inexpensive and thus frequent, regardless of socio-economic status. Indeed, it is considered part of the normal social behavior of Puerto Ricans in New York. (Here again, continual contact with the homeland has not been the usual case for other immigrant populations in America). As a result, the tide of the Puerto Rican migration continues to roll into the city, contributing to a steady rise in the incidence of bilingualism while at the same time maintaining the functional levels of the Spanish language. At present, the Puerto Rican community has reached a sufficiently stable state of equilibrium as an intragroup bilingual population to be of interest to other students of diglossic speech communities.

The particular Puerto Rican speech community in which we conducted our linguistic research (as part of a larger effort also involving several other, sociological and psychological, inquiries) was a lower-class neighborhood in Jersey City, a border section of the New York metropolitan area. The advantages of this neighborhood were twofold: a) unlike Puerto Rican neighborhoods in New York City proper this one was not so huge or densely populated as to make it impossible for us to become rather well acquainted with all those whose speech we sought to study; b) the particular neighborhood selected for study was known to be a relatively stable one (on the basis of prior demographic research by other investigators) and, therefore, one in which residents could know each other well enough to constitute a miniature speech community.

When Kriedler did his 1955-56 study of linguistic borrowing in the Puerto Rican colony of Jersey City, he noted that, as a whole, it seemed to be a very homogeneous community in terms of age, economic status, recency of arrival, hometown origins, and social relationships. Most residents were young (the median age for head of household being 36 years old), employed in factories where co-workers were Puerto Rican, had lived in Jersey City for an average of two to three years, and came from the middle-sized provincial towns, half of them migrating directly to Jersey from the Island. Most lived in multiple-family buildings, so that many were entirely occupied by Puerto Ricans, with the result that close neighborhood friendships formed a dominant aspect of their social lives. Intergroup contacts with non-Puerto Rican neighbors were few, due both to the natural reticence of the Puerto Rican in his new environment and the impersonal nature of urban living. Thus outside social contacts with English were few, and within the home, practically non-existent (Kriedler, 1957, 46-48). Exposure to English was mainly through cultural, i.e., newspapers, comics, and television, rather than social channels.

Ten years later, in 1967, the Jersey City colony can still be described by these general social characteristics. Apartment houses are still commonly occupied by Puerto Rican tenants who share intimate friendship and extended family ties. Women remain largely confined to the duties of the home and child-rearing, dominated by husbands who have not relinquished the traditional Spanish system of values in which they are the authority figures and their women and children subordinates. In our neighborhood survey, well over half of the adult women are housewives. However, many who expressed a desire to work said their husbands would not allow it, economic need notwithstanding. Others confided that they wanted to attend the informal English classes held at the nearby community center but were similarly discouraged by their husbands, even though these men recognized the overall hardships caused by their wives' inadequate knowledge of English. These desires illustrate a trend among Puerto Rican women, namely their willingness to participate in domains of interaction which demand greater exposure to the English language and to varieties of English other than those of the mass media or what they pick up from their children.

In contrast to the situation Kriedler found, where most women did not speak or understand English, our neighborhood census of 90 households indicated that less than half of the women reported that they did not speak it. Other changes in the colony are also evident. Most adult residents have lived in the States well over ten years on the average. Consequently, most of the school-age children are U.S. born. The impact of a first generation of native English speakers is being heard and felt more and more in the home where Spanish had previously predominated. Women who had once shopped primarily in the small Spanish-owned neighborhood bodegas now prefer to travel to the big downtown supermarkets, even though they are not always able to do so. Also in contrast to the earlier period, when women who worked at all took in sewing and laundry to do in their own homes, the current group of working women hold factory and service jobs which involve commuting to other neighborhoods away from their homes.

2.1. Types of Stylistic Variation among Puerto Rican Bilinguals

Despite the evident acculturation which is progressing, many members of this particular community find themselves in an ambivalent position with respect to the English and Spanish languages. Exploratory probing about their language attitudes revealed a nearly unanimous sense of linguistic incompetence and inferiority about their abilities to speak either language "well" or "correctly." Their self-criticism was directed at all levels of linguistic performance, i.e., their "sloppy" pronunciation and tendency to "drop off the ends of words" in Spanish, their heavily-accented English, the abundance of morphological contractions and abbreviated syntactic constructions in both languages, and an over-enthusiastic tendency for wholesale incorporation of lexical items (by semantic fields) from one language into the other. Their propensity for using "mixed" utterances, i.e., where even within a single sentence, grammatical constructions from both languages appear side by side in seemingly random alternation, was also a conscious criticism voiced by many, although younger members have been known to express some ethnic pride in having their own exclusive jargon, "Spanglish."

Code switching. By contrast, linguists tend to perceive these complex utterances or code switching as rather impressive displays of linguistic acrobatics. For example, we can look at this animated "Spanish" conversation between three friends talking about current racial disturbances in a nearby community (English speech underscored):

CP: Mira, este, Paul me dijo anoche que los amigos de él estaban allí en la barra y tenían esas cosas para protegerse la cabeza y con *shotgun* y todito d'eso y le dijeron, tu sabes, le dijeron, "ahora nosotros vamos a tirar a cualquiera que sea, que haga algo" le tiran enseguida. Le dijo que nunca le habían tirado a uno o habían matado a nadie pero que ahora si toda la gente de color estaban buscando por *trouble*, que ellos iban a buscar por *trouble* también.

AM: Esa gente de color, *they're not allowed to shoot at white people, you know*.

AS: Tu sabes el *trouble they're making*. Yo creo que le tiraron, este, un tiro a un nene y le explotaron un ojo.

AM: O que lo mataron.

AS: Porque lo dijeron allá, este, *there where I work*, un *manager* lo dijo.

CP: Paul anoche me dijo, mira, que ahora mismo con los policías amigos míos lo trajeron hasta esta avenida. Dicen que le van a tirar, que le van a tirar enseguida. El dijo que *they're looking for trouble*...Que son todos jovencitos, *they're young*.

As the orthography indicates, Spanish words and English words follow each other as natural units in the conversational give and take of these speakers. An earlier linguistically-oriented discourse analysis of this particular text might have concluded that extensive syntactic and lexical interference was taking place. From a sociolinguistic point of view, we would prefer to say that this rapid and continuous language switching is the defining characteristic of a particular conversational style among certain types of bilingual intimates, i.e., it can be considered a language variety of its own. This analysis is further corroborated by the fact that speaker CP, who evinces a lot of this kind of switching (what Gumperz might call "metaphorical switching") was extremely reluctant to speak any English with the interviewer, claiming earlier that she hardly knew any. She is no doubt quite unaware of how much English she in fact does know and use. A more limited type of code switching (perhaps more accurately called "borrowing") is common even among primarily monolingual Spanish speakers, namely, the use of English words as hesitation phenomena (see Maclay and Osgood, 1959) or signalling devices which indicate the semantic structure of the discourse itself. Among the more frequent forms are: "well, anyway...; ..., y'know,...; tha's right...; I mean,...; O.K.; bye bye."

Stylistic switching. Switching of the above types, in which speakers alternate rapidly between languages in casual conversation, are among the most interesting varieties of spontaneous speech to study. However, the sophisticated field techniques and equipment required to adequately record as well as analyze such data were beyond the scope of our project. As we have said before, we have restricted our study to an analysis of the ranges of variation within each language as they are used separately by the Puerto Rican speech community.

The extent of this variation is evident from the following samples of "formal" and "informal" Spanish and English speech taken from the tapes of four informants. These speakers, whose biographical sketches accompany each sample, are socially and linguistically quite typical of the range of Puerto Rican bilinguals to be encountered in the Jersey City neighborhood, and, we would assume, in most urban Puerto Rican neighborhoods in the New York City area. These samples also show that the speech community is far from being homogeneous. Residents range from the young, acculturated, U.S.-born, to the older, rural highland migrants who still value their traditions and cultural heritage. Much of this social variation is readily reflected in differing speech styles, whose total effects are achieved by a subtle combination of phonological variation, contractions of common words, syntax, content or topic of conversation, and, of course, intonational as well as extra-linguistic phenomena such as laughter and rapid speech. In each set of samples, the more careful style is presented first and the more casual last.

I. 1. Ó, es obligación! (emphatic tone), Sí, la mamá podía decirle no, porque es una autoridad también. Pero no obtante si la madre no se encuentra con suficiente otoridad, aunque ella debía tenerla, pero si ella no conoce su otoridad, pue le echa la responsabilidad al otro. Pue la consequencia era que merece un castigo, merece un castigo de parte del padre. No, yo no la dejaría ir por el mero hecho de que el deber de él es, si el tiene interés en la muchacha, debe él venir personalmente hablar con ellos.

2. Mira, yo 'tuvi a Puerto Xico hacen dos ano. (very fast) Yo fuí com bacacione po'que yo tra'jab' aqui. 'Tonse tenía do semana vacacione y me dieron do semana, mah, um me'. Y me pusi a trabajar y tab'je cinco mesih allá...en u' xehtauran pa' tu'ihta. Bueno no querían que me viniera y tu sai' como yo tuve que venirme fuga'u! Bueno pueh, asi he trabaja'u, pa' mi, 'onde quiera. Ahí lo mejore sitio me llaman a mi a trabaja' tam pronto...supieron que yo ehtaba allí, tu sabe, llega'o. (laughter)

This speaker, Carlos R., is a 60 year-old man quite representative of the skilled, plucky, highly motivated personality type found among many men from the central Puerto Rican highlands. His moral standards are very exact and traditional, as seen from the first passage. He seems to be able to make himself indispensable wherever he goes by virtue of his energetic devotion to his trade as a cook. When he was still a boy "in short pants", his father brought him to San Juan and "turned him loose" to earn a living as a dishwasher. He has vivid recollections of hard times during the depression when he subsisted on stale bread and slept in hallways. He lives in the States for the sake of his son, but vacations in Puerto Rico often, during which time he generally ends up working because big restaurants still entreat him to return to cook for them. He is typical of the highlander in his ability to lapse into high-flown language on any moral issue, using formal qualifiers and archaic syntactic patterns to enhance his opinions. Phonologically, his speech still retains many features of the highland dialect despite his 20-year residence in the States.

II. 1. (Retelling a story to the interviewer from a pre-taped conversation)

> Now this guy met a girl somplace at a party or sump'm, I don' know, he didn' say. Now he's callin' 'er up for a date. Well, he dials an' he says, "Hello, this is Tony Figeroa." The mother answers, she says, "Que desea?" He says, "Yo quiero hablar con..." She say, "Un momento, p' favor. Manela, un tal so-and-so quiere hablar con usted." When she picks up the phone, she says hello, so he says, "Listen, what a' you gonna be doin' Saturday night?" She says, "Nothin', why?" He says, "'Cause 'ere's a nice movie playing." She says, "That sounds nice."

2. They're a'ways like dat. (disgusted) Like I wen' t' de restraun' an' de're a'ways showin' off abou' how much dey could do where they come from, y'know. So ah took de t'ree t'de restraun' las' night, so I order 'em, what was i', roas' beef, mash potatoes an' string beans, y'know. So he says "Ah don' like i'." He didn' even taste i'. He sed he don' like it 'cause he wuz afraid he coudn', he wasn' able' to cu' meat. So ah ate mines an' ah says "O.K. ah'll take you's, an' ah a'e his too." When ah'm eatin' ah don' care; if ah 'ave to use mah han's, ah use mah han's.

3. Si p'que tu hace una cosa una jeba y la va fregal, dipue la je'a va llegar a, tu sai..., yo voy continuamente arma'o. (very fast) Si, eh asi, p'que si tu hace una co'a con la je'a y 'tonse lo va y dice al amigo tuyo, 'l amigo tuy' ahi 'ice pwe' yo voy allá a metel la pala, sí p' hace' algo tambien. Y ahí, que se cabre a'guno, y' know.

Juan H. is 20 years old and has lived in the States for ten years. He exhibits one of the widest bilingual ranges in our sample and is a talented, spontaneous code-switcher. Perhaps he shows a greater stylistic range in Spanish than in English, although in either language, his sense of "formal" speech is considerably "freer" by conventional standards. He works as a shipping clerk and belongs to a local street-corner group. His casual conversations centered around his gang and consisted largely of putting down most of the members for being "big-mouthed" and of describing at length and with sycophantic enthusiasm the various illicit and mysterious activities of an older Negro friend whom he admires most for his generosity and fearlessness.

III. 1. (when asked to discuss his impressions of the speakers on a pre-taped conversation)

Ehte, quiereh una ehplicacion de elloh dos o de todos los

Ehte, quiereh una ehplicacion de elloh dos o de todos los tres que ehtaban en la conversación? Como, como opinan, como eh que se hrelacionan el idioma mah o meno? En inglés, la máh que tiene idioma de inglés e' la muchacha. Parece que el muchacho tambien él tiene lo dos idioma pero que sí puede hablar ehpañol perfecto, porque de la folma que llamó primeramente a la mamá, demohtró que habla ehpañol máh perfecto. Sin embalgo, al hablar con ella cambió la voz para hablar ingléh y que la mama no creo que hable much' inglé a perfección.

2. Tuvo un caso ahi que uno xeusó il al almi. Trataron de mete'lo preso y trataron y salió al sueldo, al suelto po'que el dice que, que ni'gun puerttoxxiqueno tiene derecho a sel preside'te Ehta'os Unido y dice que si ningu' puettoxiqueno tie'e derecho a se' peside te, que no eh americano, que no tien' derecho il a defe'de la patria. Pue, uno se dice que 'nemos que defende'la patria (laughs)i si etamo' obliga'o 'efende' la, te‘emo que defende'la, hombri,hombres y mu'ereh! Y el otro punto máh sería que no se 'l polque 'pesialmente la nació americana se abasa a tenel que gahtal tanto dinero y ta‘ta vidah en asunto de tan poc' impolta‘sia en sitioh tan xetirado.

Victor N. is a 37 year-old father of five who works as a maintenance man at the neighborhood church-sponsored Puerto Rican community center. He seems to be a responsible yet relaxed and good-humored man not bothered by too many social pressures. Like Carlos R., his original highlands background has provided him with a sense of "proper" speech, but his attitudes and values are not as rigid as those of Carlos R. Through his period in the service, he learned English and became somewhat Americanized, but he is by no means "sold" completely on the American way of life, although he is well-informed on public issues. Perhaps because of his highland origins, he resists integration into the dominant culture more than do his coastal counterparts.

IV. 1. Well, at the campus, the freshmen are required to stay in the dormitories the first year. An' then after that y' have to live off campus. And, uh, one of the doctors where I used to work told me to get in touch with this other doctor, that he has a home about a five-minute walk from the campus, and maybe I could board there. Y'know, I won't have to worry about looking for a place, y'know, to board nex' year.

2. (Retelling a story to the interviewer from a pre-taped conversation)

She di'n sound like he' father' would say yes, y'know. The mother said, "ah don' know, y' have t'aks 'is pe'mission." She goes, "Hello Tony, uh, would y'call back tonight at eight o'clock, I have t' aks my father." I don' know, I don' think she know him, she woulda sounded a little more enthused about i'. I mean, y'know, she sound as if, y'know, it's just another date. I dunno if it was because o' the language, or no' , but maybe it's because she din' know him so well, so I really cou'n' say.

Lucy R., aged 18, is a highly mobile young woman following the footsteps of her mother who has been to college and works as a nurse. Her speech is completely American white lower-middle class, i.e., it lacks the features of Negro speech that are commonly found in the lower class speech of U.S.-born Puerto Ricans. In contrast to most of the other speakers in our sample, who were more challenged by the content of the interview itself than by the personal relationship to the interviewer, this speaker felt a considerable social need to be well thought of by the interviewer. Consequently, her relaxed conversations centered around such prestige topics as education and satisfactory work experiences. In these discussions, her careful pronunciation and choice of words indicated her intentions to be thought more cultured and different from her lower-class neighbors.

The remarkable diversity in the styles of these four speakers is evident even from the modified conventional orthography. They indicate a heterogeneous speech community rich in expressive means, a community which is undergoing great linguistic (and cultural) change simultaneously on several levels and at differing rates. In studying this group, we have attempted to concentrate on four kinds of sociolinguistic analyses:

1. Description of the stylistic structure of the variables for the bilingual community as a whole (Sections 4 and 5).
2. Isolation of the specific variables which differentiate linguistic subgroups from each other within the speech community (Section 8).
3. Correlation between linguistic subgroups and sociological (demographic) variables (Section 8).
4. Description of the co-occurrence patterns among variables which define styles (Section 7).
5. Correlation between the range of stylistic variation and degree of bilingualism in the sample as a whole (see Chapter VI).

Footnote to Section 2

[1] This figure refers to net migration and is based on the 1965 census. The high of 69,000 incoming net migration occurred in 1953. Figures are from the 1965 Annual Report, U.S. Immigration and Naturalization Office, San Juan, quoted by Senior and Watkins, 1966, page 703.

3. Sociolinguistic Field Methods

How does one go about documenting the interaction patterns between language choice and social setting on the one hand, and the linguistic, stylistic varieties used in these settings, on the other. There are two methodological approaches to gathering data on such variation. The first is based on Hymes' "ethnography of speaking" model (1962, 1964, 1967) which analyzes the speech community in terms of a taxonomy of components which comprise the social context of communication. Hymes himself recognizes the complexity involved in attempting this type of analysis:

> "Rules of speaking do not usually refer to all components of a speech event, and often to as few as two or three. Choice of code may be defined in terms of code and interlocutor alone; or code and topic alone; or code, interlocutor, and setting; etc. It is necessary to distinguish the entire range because in a given case any one may be defining. Moreover, a non-defining component may yet condition the success or other aspects of the outcome of a speech event." (25)

Discovering the determining components in any particular community must necessarily involve extensive and careful field observation. The investigator's goal is to gather data which illustrate "what code is used, where and when, among whom, for what purpose and with what results, to say what in what way, etc., subject to what norms of interaction and interpretation " (Hymes, 1964: 8). In principle, it is possible literally to follow one's informant around on "typical" days (assuming he would allow it), exhaustively categorizing the combinations of components (speaker, addressee, topic, setting, etc.) to arrive at an emic definition of the significant variables (for that particular community) which determine linguistic diversity. Gumperz' work (1964a) seems to indicate that it is possible and profitable to use this approach for studies dealing with small group interaction and communicative networks among restricted samples of speakers.

However, the particular Puerto Rican neighborhood which we studied, while relatively small in size, is gradually acquiring the characteristics of a typical urban neighborhood, i.e., its members are considerably mobile, living in one neighborhood, working and shopping in another, and visiting relatives and friends in still another. Practical sociolinguistic fieldwork of the type consistent with Hymes' model would be formidable in a speech community of this complexity and diversity of social setting. In addition, there are presently no clear-cut criteria, either intuitive or methodological, for judging when one has arrived at the total combinatorial range of speech components which may be crucial for understanding speech variation and stylistic shifting. It would also seem that non-native investigators are at a considerable disadvantage. Chomsky has claimed that accessibility to native speaker intuition is prerequisite to understanding the nature of "deep grammar". In analogous fashion, we would be inclined to claim that a study of the multifarious subtleties to be detected in rapid, continuous stylistic switching will be most successful and significant when the investigator is a native of the language and culture under study. As a native, he will already be armed with a set of both linguistic and cultural expectations which will aid him in predicting and verifying his data. Without either this near-native fluency or the lengthy period of continuous observation and contact which an ethnographer must invest in his community, other methods for studying large and complex speech communites must be sought.

Labov has stressed the importance and relevance of quantitative methods for sampling heterogeneous urban populations. Since these populations are complex entities by definition, variation and diversity are presumed to exist, in fact, much of it is often known in advance. By choosing a small set of significant linguistic items, such as phonological variables, it is possible to sample both speakers and styles through carefully controlled elicitation procedures which maximize the possibilities for linguistic variation while minimizing the formal bias of the procedures themselves.

In many respects, Labov's methods are well suited to an investigation of bilingual variation, if the aims of the interview are restricted to discovering stylistic regularities in each language as a separate entity. In other words, no attempts should be made at gathering data on inter-language switching, since this is the more difficult kind of variation to collect and requires techniques more based on observation and participant-observation than on elicitation alone. Given this restriction, adequate samples of styles in both languages can then be gathered quite efficiently. Both structured and unstructured materials are needed in order to overcome the inherent contradiction of having one and the same interviewer collecting "representative" styles of each language. A bilingual interviewer may be a maximally fluent style switcher in both languages, but this fact alone does not guarantee successful elicitation of a bilingual stylistic range. If languages are not functionally equivalent for most bilinguals, as we have claimed, but depend on such variables in the speech situation as topic, place or listener, then such elicitation cannot depend entirely on the interviewer nor on prepared interview materials. For a discussion of the variety of techniques used, see Section 3.1 and 3.2 to follow.

3.1. General Methodology

Our linguistic analysis is based on texts drawn from a stratified sample of 45 informants chosen from among the 90 households of our neighborhood survey. All 215 people over the age of 13 were divided by sex into four groups, each very roughly defined by similarity in job responsibility and level of educational achievement. From each of these eight groups, informants were chosen on the basis of willingness to be interviewed as well as age distribution.

The units chosen for measuring stylistic variation were phonological variables hypothesized as being among the most salient features in Puerto Rican Spanish (henceforth PRS) and Puerto Rican/New York English (henceforth PRE). Labov's work has convincingly demonstrated that phonological variables have the advantage of high frequency of occurrence in spoken text, easy codability, fair immunity to conscious suppression by the speaker, and widespread distribution throughout the speech community. The procedures for observing stylistic variation of phonological units are adapted almost in toto from Labov (1966) and are, therefore, only briefly reviewed here.

As Labov and others have noted, the interview situation is itself one in which careful speech would be the most appropriate style. Here, it is usually not difficult to get a speaker to shift to even more formal speech, but the converse is not true. If we are to elicit everyday speech behavior, we must develop procedures which override the interview constraints, since it is these less self-conscious varieties which play the most important part in demonstrating the systematic nature of linguistic variation.

Five elicitation contexts were built into the structure of the interview itself to explore the repertoire ranges of our speakers. Our linguistic materials were interspersed with materials from the psychological studies of our project to form one composite interview. Certain samples of our style contexts were thus based on speech elicited in response to the psychological questions, such as Style WN and Style B.

The five elicitation contexts or style contexts are the same for both languages and are as follows:

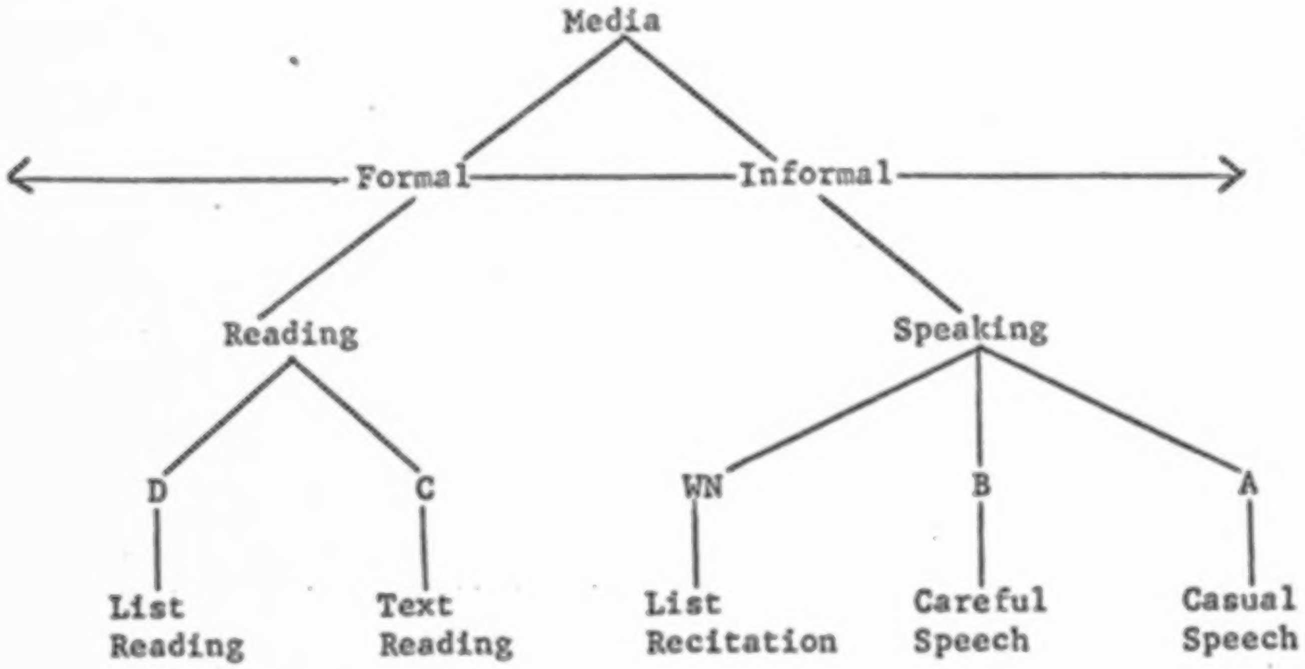
Style Context	Description
D	list reading
C	text reading
WN	list recitation
B	careful speech
A	casual speech

The items elicited for reading styles D and C can be found in Appendix 12.1 to this chapter. By definition, both D and C are closed corpus styles, since all informants have potentially equal opportunity to be observed in their pronunciations of the same set of words and sentences.[1] In Style D, informants were asked to pronounce a short list of isolated words containing certain variables. In Style C, they were asked to read two paragraphs in each language containing all the variables. The next three styles are all open corpus styles and here the volume of speech available for analysis varies from informant to informant.

Style W_N is elicited by asking the informant to name as many words as possible which belong to a specified societal domain.[2] In Style B, the samples representative of the careful speech considered appropriate for an interview situation were taken from the second re-telling task of the psychological materials. In this task, the informant was required to listen to a pre-taped story or conversation and then asked a series of questions concerning the details of the story (see Appendix 8.2, Bilingualism in the Barrio). The nature of the questions were quite formal so as to predispose the informant to answer with care. Style A presumably represents a freer, more casual style than B and we would assume that it more closely approximates the kind of speech an informant might use with his family and friends. The materials were unstructured, consisting of free conversations where the interviewer tried to draw the informant out on personal opinions and topics which were not necessarily related to the contents of the interview. Such conversations can take place any time during the interview, such as during a coffee break, at the beginning or the end, or even in the middle, at a natural point in the interview where digression is appropriate. There was some pre-programming of "appropriately casual" topics, but such topics were often left up to the individual interviewer's discretion and abilities.[3] A discussion of topic is found under "interview techniques" (Section 3.2).

The range from D to A forms a continuum of formal to informal speech, with reading styles being the most formal and casual or spontaneous speech being the most informal. It might be argued whether list recitation WN is not closer to list reading D than to either C or B, but it was felt that the basic style dichotomy was that of reading vs. speaking. In this view, Style WN forms the most formal of the spoken styles. The hypothesized style continuum can be diagrammed as follows:

Figure 2


Media
Formal
Informal
Reading
Speaking
D
C
WN
B
A
List Reading
Text Reading
List Recitation
Careful Speech
Casual Speech

We do not claim that these five "styles", as we have called them, necessarily exist as separate entities in the actual linguistic repertoires of our speakers. After all, most people are not often called upon in real life to read a list of strange words or to recite another. These styles are not replicas at all but merely analogs of real speech situations where speakers are continuously varying their verbal behavior in response to subtle, unconscious factors present in any given social situation requiring speech. Our styles are, properly speaking, elicitation procedures; their labels as styles are justifiable only insofar as we demonstrate that the speech samples observed by these procedures do continuously and measurably (hence systematically) shift along a style continuum.

3.2 Interview Techniques

Several discussion points suggest themselves regarding the sociolinguistic interview that we conducted with our bilingual speakers. We must always keep in mind that the interview is itself one kind of social situation and that language choice, role-relationship, and topic influence both quantity and style of speech here much as in any other kind of verbal interaction. So we can profitably discuss the use of language and style most appropriate for the overall conduct of the interview. Another is the importance and difficulty of building up positive rapport between informant and interviewer. What devices does the interviewer resort to in seeking to establish this atmosphere? What other social factors in the interview situation affect its outcome and success?

Verbal style of interviewer. The main objective of such interviews is to obtain examples of as wide a range as possible of speech styles for both Spanish and English. Yet it causes a great strain on informant and interviewer alike if there is continual, artificially induced code switching. In addition, not all interviewers are equally fluent or natural in their verbal styles of both languages. It seems obvious that a Puerto Rican bilingual interviewer might have more success in general than a non-Puerto Rican interviewer, insofar as he is a member of that culture. However, it is also perfectly possible that the non-native can develop verbal styles which are functionally equivalent, though different in form, as Labov has pointed out (1965b; 16).

We achieved varying degrees of success in this regard. We had four interviewers, two native Spanish speakers, male and female, though only the male was Puerto Rican, and two non-native Spanish speakers, both female. Assignment of interviewer to informant was not random; the non-native Spanish speakers were assigned to informants who seemed to have an adequate grasp of conversational English, as assessed from our preliminary survey, and the native Spanish speakers interviewed those with the least English fluency. Thus all interviewers tended to favor the language in which it was easiest to relate to the informants, in an effort to make the interview itself as meaningful and enjoyable as possible.[4] As a result, the two native Spanish speakers often conducted almost the entire interview in Spanish while at least one of the non-native speakers preferred to use English. In each case, switching to the other language for the informal styles was often regrettably minimal. The net result was that the quantity of Spanish and English speech available for stylistic analysis was not entirely independent of native fluency of the interviewers. Inspection of the total linguistic samples showed that 69% of the most informal Spanish speech was elicited by the native speaker interviewers vs. 31% for the non-native. Conversely, 61% of the most informal English speech was elicited by the non-native vs. 39% by the native speakers.

It might be said that some of this bias could have been removed if the interviewers had made a more conscious effort to switch, especially the native speakers, for whom styles in either language posed absolutely no problem. But here is the inherent contradiction we alluded to earlier. Artificial code switching often serves negatively to increase social distance between interviewer and informant, reversing the positive rapport built up in the primary language. This is necessarily true because Spanish and English are not functionally equivalent languages for most of our bilingual speakers. Many use English when they must and in limited contexts, e.g., they are often able to read it and use English words and phrases to specific communicative requirements. But they are not generally comfortable speaking it as an informal medium of conversation, most especially when they have the option of conversing as peers in Spanish. For many who admitted an inferior knowledge of English, the unnatural use of conversational English merely emphasized the already strange and formal nature of being interviewed. This dilemma is minimized if only one language is used for the greater bulk of the interview conversation. Thus even when the interviewer consciously remembered to switch languages in order to probe further into the informant's linguistic range, the English or Spanish elicited was often noticeably self-conscious and forced; both parties seemed aware of the artificiality of the switching process. It is likely that our Puerto Rican bilingual speakers could use and switch English more adequately and less self-consciously out of real communicative necessity, not in the artificial interview situation, when they already know the language capacities of the interviewer.[5]

Two examples were quite instructive of the general problem. Luis H. was interviewed by our male Puerto Rican interviewer. The relationship was one of older to younger man. In the formal bilingual tasks of the interview, the informant was very cooperative in providing samples of both Spanish and English. To judge from his English speech in these, he seemed to have more than adequate communicative competence in the language. However, when it came to retelling a story in which he was to repeat in English those parts of the story which were enacted in English, he refused to do so, although he had understood perfectly what had been said. Despite gentle coaxing and encouragement (in Spanish) on the part of the interviewer, the informant could not bring himself to repeat the story in English. Nor was the interviewer inclined to press the point, since he too seemed to sense the inappropriateness of using conversational English to the older man. To have done so would have been interpreted as a sign of disrespect. The second example was also with the same interviewer and took place with the young man whose three speech styles are indicated by Roman numeral II in our four examples of stylistic switching in Section 2, above. Here the relationship was one of peer group membership. Our interviewer had become a familiar figure in the neighborhood and got to know quite a bit about the informant's friends and activities. Much of the casual conversation between the two showed a great amount of spontaneous code switching by both participants, and when the topics became especially intimate, about sex or dodging the law, their Spanish was so heavily jargonned as to be almost incomprehensible to the outsider. Had our interviewer not been of the same peer group, we doubt whether we would have been able to elicit these extremely informal styles. This latter example illustrates that, in the rarer cases where two languages are almost equivalent in use for an informant, successful elicitation of the stylistic fluency in each depends heavily on the verbal abilities and social characteristics of the interviewer himself as the single overriding factor in the interview situation.

Split interview. We would suggest that some of the inherent inequalities discussed above between informant and interviewer might be overcome if each informant was to be interviewed by two different people, the first using only Spanish and the second only English. If interviews are lengthy to begin with, as ours were, split interviews would pose little if any additional organizational problem. On the contrary, they should increase the likelihood of more accurately sampling the actual language abilities of people with a recessive language. Even for fluent bilingual informants (who, as we have seen, do not pose as much of a problem for a fluent bilingual interviewer) additional information about their range might come to light in a split interview. For instance, their degree of fluency in each language over a range of subject matter might be more measurable in the absence of an option to switch. The split interview would have the additional advantage of showing to what degree the respondent is able to express himself other than automatically, i.e., to "have a personality" in his second language. Thus some of the questions asked in the psychological portion of our interview schedule as to the appropriateness of either language for a given domain might be more pragmatically illustrated. For example, if in the context of a general conversation, more numerous and accurate routines and opinions were expressed on a given topic in one language than in another, this would be indicative of a speaker's communicative competence in that language. So would his ability to assume a relatively more American or more Puerto Rican personality be more fully tested when the temptation to rely on a bilingual interviewer's knowledge of two languages is removed. In our current work, split interviews of this type were not used.

Other variables besides verbal fluency of the interviewer affect the outcome of the interview itself. Time was a factor insofar as we felt it was important to avoid fatiguing our informants with the often lengthy tasks of the interview at the same time as eliciting as much spontaneous speech as was naturally possible.

Topic. The choice of topic played an important part in our ability to elicit the kinds of free speech needed for our samples of casual style A. In some cases, it proved to be a delicate task, since it had to neutralize or minimize the social distance already apparent between a middle-class person interviewing a lower-class informant. For some informants this was resolved in the first moments of interaction, for others after some period of time, and for a few, not at all. Naturally this sense of distance was least evident among the younger, U.S.-born informants as well as among those satisfactorily employed or otherwise well adapted to the environment. It was most evident with those who had good reasons to feel most alienated, i.e., those on welfare or with employment difficulties and those whose moral status within the community was considered questionable, thereby creating anxiety and suspicion. For this latter group, topics of conversation which involved some degree of self-disclosure on the part of the interviewer (which might parallel the informant's experience) was often exploited for overcoming social reticence. Thus the topic of romance or sex, if it arose naturally, elicited large amounts of especially spontaneous speech, since the informants felt it was an exchange of confidences rather than a unilateral exposure of self. For older people, it often seemed sufficient to admire their homemaking efforts when this could be done with sincerity. Likewise, expressions of familiarity with and appreciation for traditional cooking, where appropriate, met with enthusiastic response, as was commiseration about the school system, crime, local disasters such as fires, and the rat problem. Life history was a very easy and comfortable topic, especially useful at the beginning of the interview to gain the informant's confidence and to bring out the sentimental feelings of the Puerto Rican for his homeland or his acquaintance with the U.S.

Place. The variable of place or location did not seem to be so important in its effects on the interview. The project had its base of operations in an apartment located in the main block of our sample population. The original plan was to conduct all of the linguistic interviews in the apartment, but this was found to be impractical. Although a number of interviews were conducted there, excepting those held at night, the project apartment had no advantage over the informant's apartment and had some disadvantages. The high level of street noises (due to children playing, a nearby school, and the local firehouse) in the daytime was equally well heard from one apartment to the next. We often found that our informants' apartments were quieter than the project's, particularly as the project apartment attracted a good many curious children. Also, there was the problem of successfully getting a female informant with infant children out of the house during the day. At night, however, the noise came from the home television set or the activities of the entire family and friends gathered together, so that the project apartment proved more useful for those interviewing hours. In general, we found that the informant's home is recommended for daytime interviewing and the office apartment for nighttime. This is tantamount to interviewing according to these patterns: women/home/daytime vs. men/office/evening.

The location of the interview did have some effect in putting the informant at ease. Many people preferred being interviewed at home and tended to be less relaxed in the office apartment, but this was not necessarily the case all the time. If they responded without hesitation to the suggestion that the interview take place in the office because it was quieter, they were usually at ease and natural when interviewed there. Women were most likely to refuse, but a few were glad of the opportunity to get away from their children for a while. In the case of men, most were accustomed to going out in the evening anyway, so the office posed no disruption of their accustomed behavioral patterns.

Sex of interviewer. Finally, the factor of sex of the interviewer was relevant. It seemed most practical for this community to have women interviewed by women and men by men. Social propriety, topics of conversation, and role-relationship as defined by Puerto Rican culture all tend to mitigate against any generalized practice of mixed interviewing. While informal questioning of some female informants disclosed that it would not be considered improper for a female to interview a male informant, it seemed doubtful whether the converse would be true. Thus a sense of social impropriety provided a greater constraint in the case of women being interviewed by males than of men being interviewed by females. Regarding appropriate topics of conversation, it is true that a female interviewer may discuss such topics as public events with male informants, but in some cases, the role-relationship implied by these topics also proves disadvantageous. In general, it is much easier for the female interviewer to cast aside the formal aspect of the interview relationship with a female informant than with a male. The woman does not feel the need to be defensive about her education or occupation, or the lack thereof; for the most part, she is being interviewed in her own kitchen where her role and status are reinforced and she is on an equal social footing with the female interviewer. A man's role and self-esteem, however, may be threatened if he is interviewed by a female and in such cases, his ability to relax in conversation seems to be proportional to his own sense of educational and occupational achievement. In our fieldwork, only female interviewers were used for female informants. However, 45% of our male speakers were interviewed by female interviewers (since we had three females to one male interviewer); their abilities in eliciting casual speech were almost as successful as the male interviewer's.

Equipment. All interviews were recorded on portable Uher 4000-S tape recorders using their companion M514 microphones. Several sessions also made use of an Altec 677 lavalier microphone, which provided us with some of the clearest distortion-free speech replicas of all. We did note that the lapel microphone caused no significant increase in self-consciousness on the informant's part. It did prove inconvenient, however, for female informants who sometimes had to interrupt the session to pick up their infants or to leave the room temporarily to respond to calls from family members or visitors. All data were transcribed from the Uher model, using high-quality binaural Superex headsets to ensure maximum perception for the transcriber.

Footnotes to Section 3

[1] The responses were, in fact, not equal in quantity for all speakers. Time, fatigue, or literacy were factors contributing to the completion of the readings. 11% of our informants could not read either language. 17% could not read English and 9% could not read Spanish. In these cases, our interviewers read the passages slowly, phrase by phrase, in the standard dialect, and had the informants repeat after them. Admittedly, this procedure has some questionable merit, as it introduces a new variable into the context, namely that of mimicry. Only one passage was elicited when the going proved difficult in either language, as literacy was a sensitive issue for those not skilled at reading.

[2] For example, the informant is asked to name as many items as possible found in a kitchen, such as "table, knife, dish" or "fregadero, cuchara, mesa," etc. During this task, interviewers avoided any interruption of the recitation itself. The word-naming task was timed for one-minute responses.

[3] We were not as uniformly successful in eliciting this style as we had hoped to be, although we believe we succeeded in the vast majority of cases. Differences in interviewer abilities in relating to informants, as well as general reticence on the part of some informants, are largely responsible for the few cases of failure to obtain sufficient style A speech.

[4] As mentioned earlier, the linguistic materials gathered for our analysis were incorporated together with the psychological materials to form one totality. As a result, the entire interview took from a minimum of two hours up to four hours to administer; some had to be done in

two sessions. The lengthiness proved cumbersome in general, and in a number of cases of single-session interviews, caused fatigue and impatience on the informant's part. As a result, an overall 11% of our 45 linguistic interviews were not completed.

[5] We are all familiar with this phenomenon in our own use of a second language. Until fluency is developed to a fairly high degree, it is somehow embarrassing to use that language with one who knows English at all adequately. On the other hand, it is quite challenging and enjoyable, regardless of errors committed, to use it with one for whom this language is the only channel of communication. Moreover, in the latter case, fluency is decidedly increased precisely because no other option exists.

4. The Stylistic Structure of Puerto Rican Spanish Phonological Variables

Each of the variables[1] to be described occurs in a number of different phonological environments which could potentially affect its variability. For a few, with a high functional load, grammatical environment may also be a factor. Thus each variable has a number of subvariables, one for every significant morphophonemic environment. Parenthesis notation is used to denote either the variable or its subvariable. For example, (S) would be a cover symbol for all instances where morphophonemic /s/ may appear, while (SC) is the particular environment of /s/ before a following consonant within the same word. Each phonetic realization of a variable is called a "value" and is coded with an integer for easy reference, e.g., variable (S) when pronounced as the phone [s]is coded as S-1 and when realized as the phone [h] is coded as S-2. It is important to keep in mind that the absolute number of occurrences of a value in any style is not as important as the proportion or relative frequency of that value in that style in relation to the other possible realizations. Our quantitative measures of variables are arrived at by totalling all instances or occurrences of a given value and dividing it by the total number of occurrences for the subvariable to yield percentage scores. By means of these percentage scores, values can be compared both to each other and across the axis of stylistic variation. In some of our subsequent analyses, absolute frequency scores or average mean scores are also used.

From a dialectal point of view, a number of investigators have described the particular phonological characteristics of Puerto Rican

Spanish, most notably Navarro-Tomás in his detailed 1950 study, El Español en Puerto Rico, and less inclusive studies by Alonso (1953), Zamora Vicente (1960), and Rosario (1965).[2] From a structural point of view, PRS phonology has been described in contrastive analysis studies by Wolff (1950), Kriedler (1957), Kindig (1959), Jones (1962), de los Angeles (1962), and Ribera (1964). Except for Navarro-Tomás, free variation as a phenomenon of any magnitude has scarcely been commented on by any.

Isolation of the significant PRS phonological variables is based partly on materials found in Navarro-Tomás and partly on our own preliminary probes into the New York Puerto Rican community. We picked for study those sounds which he indicated had a high amount of inter- as well as intra-speaker variation and which, in Puerto Rico, were possibly correlated with such non-linguistic factors as highlands vs. coastal speech, uneducated agricultural worker vs. educated urban, formal vs. casual speech, etc.

PRS Variable (RL).

> Arroz con coco
> me quiero casar
> con una viudita
> de la capital.
> --Latin American
> nursery rhyme

A major phonological variable in PRS is the shape of morphophonemic /r/ or variable (RL), which is widespread throughout Latin American Spanish. As our nursery rhyme so charmingly illustrates, Spanish variable (RL) involves frequent, seemingly arbitrary, and often bidirectional alternation between /r/ and /l/ for several phonological classes of words. In PRS, a higher percentage of the cases involve words with morphophonemic /r/ shifting to [l] and a lower number where morphophonemic /l/ shift to [r]. In New York PRS, the first shift seems more linguistically productive and socially significant; our (RL) variable only takes cases of the first type into account.

There are four major variants, coded as follows:

Code	Phonetic Variant	Description
RL-1	[ɾ]	voiced alveolar flap; the standard variant.
RL-2	[l]	voiced non-tense alveolar lateral.
RL-3	[C:]	a notation which indicates that /r/ assimilates to the quality of the following consonant, lengthening it. Most often, assimilation occurs when that consonant is also an alveolar.
RL-0	[∅]	Phonetic zero, i.e., /r/ is dropped.

There is a fourth possible variant, called an intermediate sound [ɹ́] by Navarro-Tomás, but we found this to be so relatively infrequent in our population as to be quantitatively useless. Regarding the social significance of this variable, Navarro-Tomás has commented: "It isn't necessary to point out that educated people differentiate l and r in the usual way in correct speech, although it is certainly true that examples of this confusion can sometimes be picked up even in cultivated circles in the capital... To the foreign ear, the irregular and contradictory mixing of these consonants, with its unexpected changes from town to town and from person to person, constitutes one of the most confusing and obscuring aspects of Puerto Rican pronunciation." (82-3, translation ours).

There are two major phonological environments of variable (RL), as follows (examples are given in standard orthography):

Subvariable	Example	Phonetic realization	Morphophonemic environment
(RC)[3]	carta ponerse	kaɾta, kalta, katta	word-medial /r/ when followed by a syllable beginning with a consonant.
(R#)	mar hablar	maɾ, mal, ma ablaɾ, ablal, ablá	word-final /r/, either monomorphemic or as tense marker of the infinitive.

In the first subvariable, alternation between R-1 or standard [ɾ]and R-2 or [l] will likely result in minimal pairs like *arma*/*alma* and *suerte*/*suelte* (subjunctive of *soltar*) becoming homophonous. The confusion is widespread even among the literate high school-age Puerto Ricans in New York who have had to learn a more formal Spanish in school or who have had to learn to read it. They often confuse the spelling of words with the syllable structure CVRCV (where R is a resonant) and are as likely to spell a word like *acuerdo* as "acueldo" as to spell it with correct orthography. In the second subvariable (R#), this alternation makes a homophone out of the pair *mal*/*mar*.

Yet the confusion is not by any means complete. In formal styles, speakers will still show some adherence to the standard R-1 value. This can be seen in the stylistic distribution of variable (RL) as given in Table 1 for all 45 informants.

In both subvariables, we note a systematic decrease of the standard value R-1 along the axis of stylistic shifting. In subvariable (RC), there seem to be three major "levels" of usage. In the reading styles, there is a sharp decrease from reading of an isolated word list D to the reading of connected texts C, the percentage scores being .61 and .37, respectively. Next, there seems to be another lesser break between Style C and the spoken styles WN, B, and A, which all seem to have a rather uniform amount of the standard value,

Table 1. Stylistic Distribution of (RL) in PRS[4]

		Styles				
Subvariable	Code	D	C	WN	B	A
(RC)	RL-1	61	37	28	23	25
	RL-2	34	49	63	42	39
	RL-3	5	14	9	22	27
	RL-0	0	0	0	13	10
	N	80	213	316	607	511
(R#)	RL-1	47	42	34	31	32
	RL-2	53	57	63	48	52
	RL-0	0	1	3	21	16
	N	38	347	264	537	417

Scores are given as percentages obtained by dividing the number of occurrences of the variant by the total occurrences of all the variants of the variable.

.28, .23, and .25, respectively. This indicates that relative frequency of the standard value is not much affected by any increase in informality in the spoken media, but most affected by the overall difference between reading and speaking styles. The overriding influence of media on style is even more strongly suggested by looking at the relationship between the other two values, RL-2 and RL-3, seen more clearly in Figure 3.

In the reading styles, RL-2 and RL-3 are both on the increase from D to C but there is always a higher proportion of RL-2 to RL-3. In the speaking styles, however, we note a reversal of this pattern. In Style WN, RL-2 starts with a high of 63% and steadily decreases across styles B and A, but in almost exact inverse proportion to the steady rise of RL-3. Thus in the speaking styles of subvariable (RC), RL-2 and RL-3 move steadily across styles against a relatively constant frequency for RL-1, forming a highly patterned sociolinguistic structure which is quite different from the pattern in the reading styles, where all three values are moving. From this, we conclude that our speakers pronounce syllable-final /r/ most consistently only in the most formal of all styles, Style D. Elsewhere either [l] pronunciation or assimilation occurs more frequently. In particular, our graph shows that, for Styles B and A, our population as a whole says almost as much of the standard variant RL-1 as they do of the assimilation variant RL-3.[5]

We now look at the distribution of the second subvariable (R#). Our bar graph in Figure 4 shows that variable (RL) in word-final position contrasts with the structure in (RC), except for one aspect. The contrast is immediately obvious in that RL-2 is consistently the preferred value or norm in all stylistic contexts, even in the most

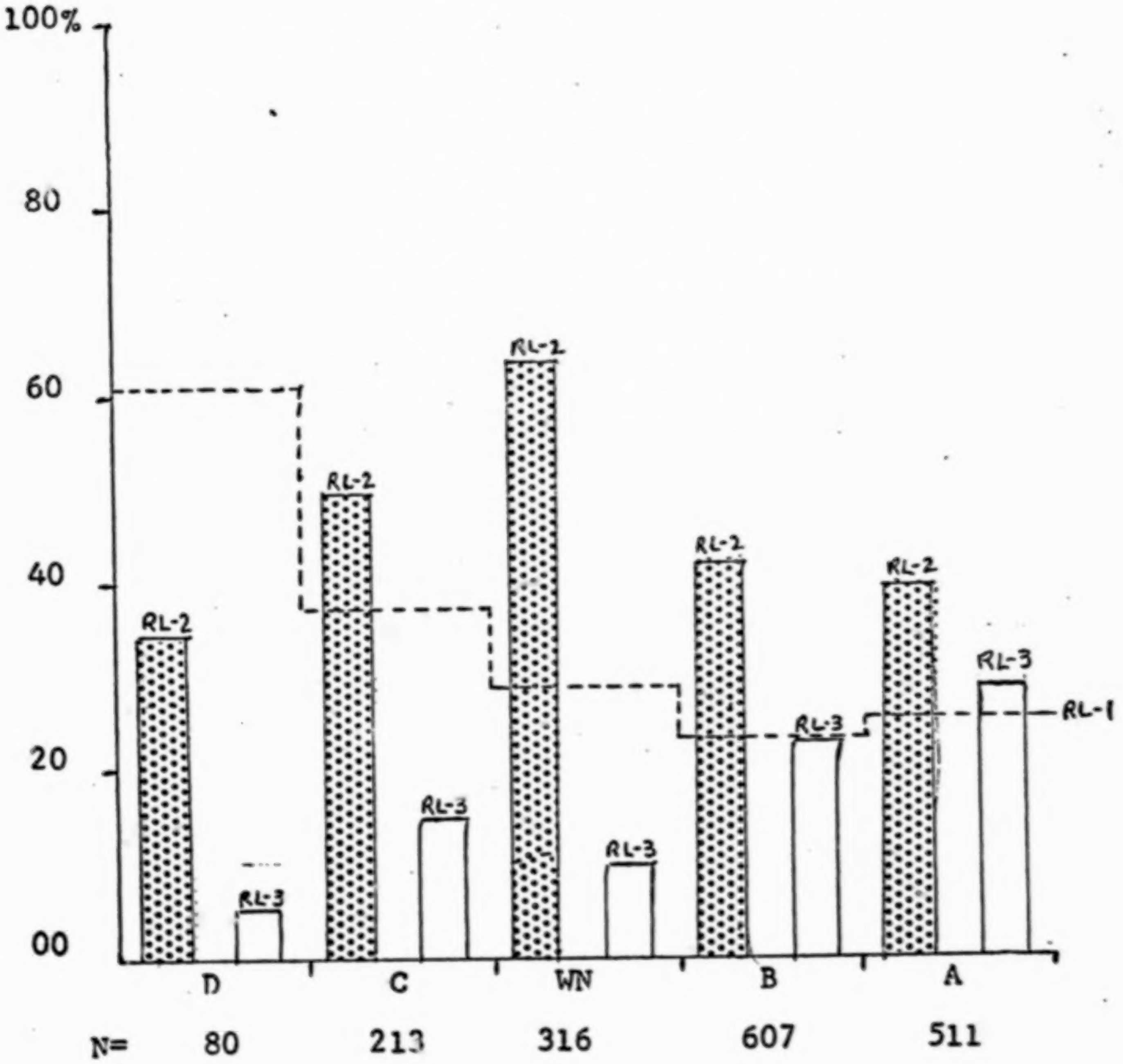


Fig. 3. Stylistic Variation of (RC) in PRS
(Total N=1527)

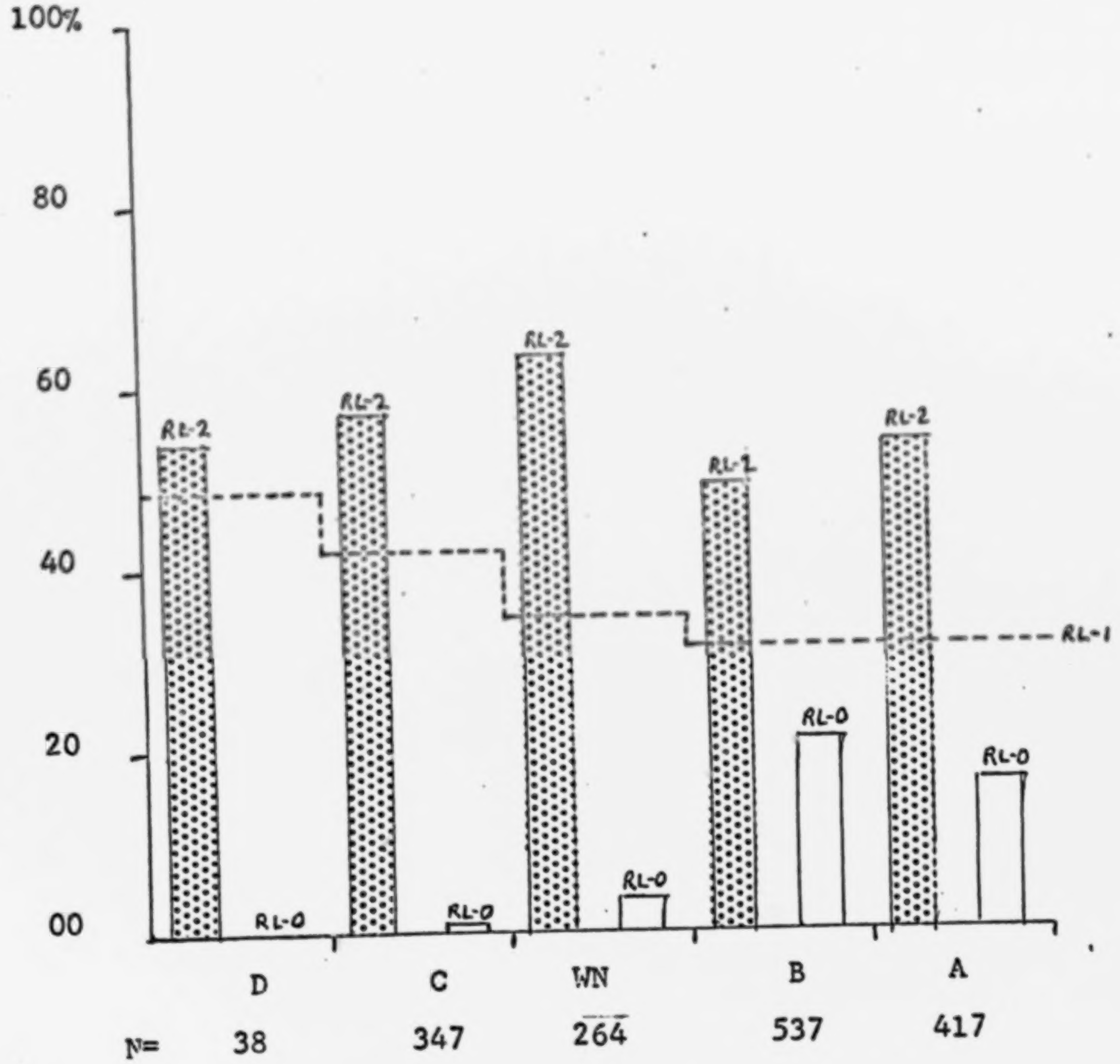


Fig. 4. Stylistic Variation of (R#) in PRS
(Total N=1600)

formal of all, Style D. This was not the case with subvariable (RC), as noted above. In addition, the zero value RL-0 shows an almost regular increase across styles, going from a low of .01 in Style C to a high of .16 in Style A; i.e., some of our speakers drop final /r/ in their most informal conversational style. The greater percentage of variant [0] in Style B than in Style A is probably not a significant difference in our study. We suggest that further research on (R#), so as to differentiate between monomorphemic final /r/ and infinitive marker final /r/, might show a difference to exist which would clarify this ambiguity in the structure of (R#).

In summing up, we may say that the crucial factor in the stylistic variation of (RL) in PRS is the difference in media, i.e., reading vs. speaking. Speakers are most apt to pronounce the standard flap /r/ in a formal reading situation. In all conversational styles, this variant remains at a stable frequency of about 30%, whereas the [l] pronunciation is the most common, with some frequency of /r/ assimilating to the following consonant in classes of words with the phonological shape of CVRCV.

PRS Variable (S). This is one of the most important and complex phonological variables in PRS and we will dwell at length on its many aspects. It has three possible values or phonetic realizations, as follows:

Code	Phonetic variant	Description
S-1	[s]	a dento-alveolar fricative; the standard variant.
S-2	[h]*	a glottal fricative with slight friction, known in the literature on Spanish dialectology as "aspirated s."
S-0	[0]	phonetic zero, i.e., morphophonemic /s/ is deleted.

Regarding the social significance of the variation of morphophonemic /s/ in Puerto Rico, Navarro-Tomás has said: "Educated people who aspirate s in ordinary conversation pronounce it with its proper sound in lectures and academic circles... The suppression of final s, widespread throughout the Island, is heard even in the casual speech of educated people, although this does not imply that the awareness for the lost s is decreasing." (73) Rosario too has noted that "aspiration and loss of s is normal in Puerto Rico, in informal conversation but many people still tend to replace their s's in school, in recitation, and in public speaking. This change has not taken place fully among members of the educated class." (15)

The following display in Table 2 shows the eight different morphophonemic environments for (S) (examples are given in conventional orthography).

As in English, the Spanish plural marker is realized morphophonemically as /s/. In cases where the realization is S-0 or phonetic [0] singular and plural forms become homophonous. Likewise, in certain verb forms, e.g., haces/hace, the 2nd and 3rd person present tense forms are also indistinguishable.

The following distribution chart, Table 3, shows the sociolinguistic structure of variable (S) for all subvariables.

It is sociolinguistically significant that the standard variant S-1 has the highest occurrence in the most formal style, D, and the least occurrence in the most informal style, A, with the decline through intermediate styles marked by distinct steps or levels. For

Table 2. (S) Subvariables in PRS

Subvariable	Example	Morphophonemic environment
(SC)	escuela hasta	word-medial s where the following syllable begins with a consonant
(S#)	arroz luz	final s which is part of the word or morpheme; may be in isolation
(Spl#V)	los hombres hablan los nenes oyen	final s which marks the plural inflection for nouns, followed by a vowel-initial word
(Spl#C)	los hombres comen los nenes juegan	final s which marks the plural inflection for nouns, followed by a consonant-initial word or final #
(Sa#V)	los hombres muchos hombres	final s which marks the plural inflection for preceding articles and adjectives, followed by a vowel-initial word
(Sa#C)	las clases muchas clases	final s which marks the plural inflection for preceding articles and adjectives, followed by a consonant-initial word or final #
(Sv#V)	tu vas al cine es un amigo	final s which marks the 2nd person verbal inflection or the copula, followed by a vowel-initial word
(Sv#C)	tu vas para allá es correcto	final s which marks the 2nd person verbal inflection or the copula, followed by a consonant-initial word or final #

Table 3. Stylistic Distribution of (S) in PRS

Sub-variable	Number of Occurrences	Code	Styles				
			D	C	WN	B	A
(SC)	1994	S-1	90	84	31	14	7
		S-2	8	15	67	79	81
		S-0	1	1	2	7	11
(S#)	993	S-1	82	78	40	20	12
		S-2	4	9	27	47	58
		S-0	12	13	33	33	30
(Spl#V)	338	S-1	--	90	--	15	9
		S-2	--	8	--	38	39
		S-0	--	22	--	47	52
(Spl#C)	1169	S-1	--	74	60	2	4
		S-2	--	9	17	38	34
		S-0	--	17	23	60	62
(Sa#V)	112	S-1	--	81	--	61	73
		S-2	--	12	--	22	17
		S-0	--	6	--	17	10
(Sa#C)	512	S-1	--	65	15	6	7
		S-2	--	27	78	69	70
		S-0	--	7	7	25	23
(Sv#V)	131	S-1	--	--	--	7	9
		S-2	--	--	--	71	62
		S-0	--	--	--	22	29
(Sv#C)	308	S-1	--	--	--	9	7
		S-2	--	--	--	58	57
		S-0	--	--	--	33	36

A dash means no data gathered for a particular style.

all subvariables of (S) except one, S-1 always has this regular pattern. The pattern of S-2 distribution is equally regular. By plotting graphs of the subvariables (SC) and (S#) in Figures 5 and 6, we can see how very systematic the relationship between all (S) values are.

For both subvariables, the relative frequency of value S-1 (dotted line) can be seen to decline along the axis of increasing stylistic informality. In both subvariables, the steepest decline of the standard value occurs at the juncture between reading and speaking styles. (As seen in the discussion of variable (RL), this further justifies our having placed Style WN between C and B along the style continuum.) Moreover, even within each medium, e.g., between D and C and between WN and B or B and A, value S-1 and S-2 maintain their relative proportions, showing a highly structured relationship. Even value 0 (which is again more frequent in (S#)[as it was in (R#)] , suggesting that word-final position seems to be a more favorable environment for the realization of zero variants in general) the overall distribution is one of increasing frequency with increasing informality of style.

Before looking more closely at the individual subvariables of (S), we might ask ourselves whether the community-wide pattern noted in Table 3 can also be found as well on the level of the individual speaker. Table 4 shows that the relative frequency distributions for two female informants are the same across styles, even though individual frequency scores within styles are higher for one speaker than for the other.

The first informant, No. 125, is an older working mother born in a provincial highland town in contrast to informant No. 150, who

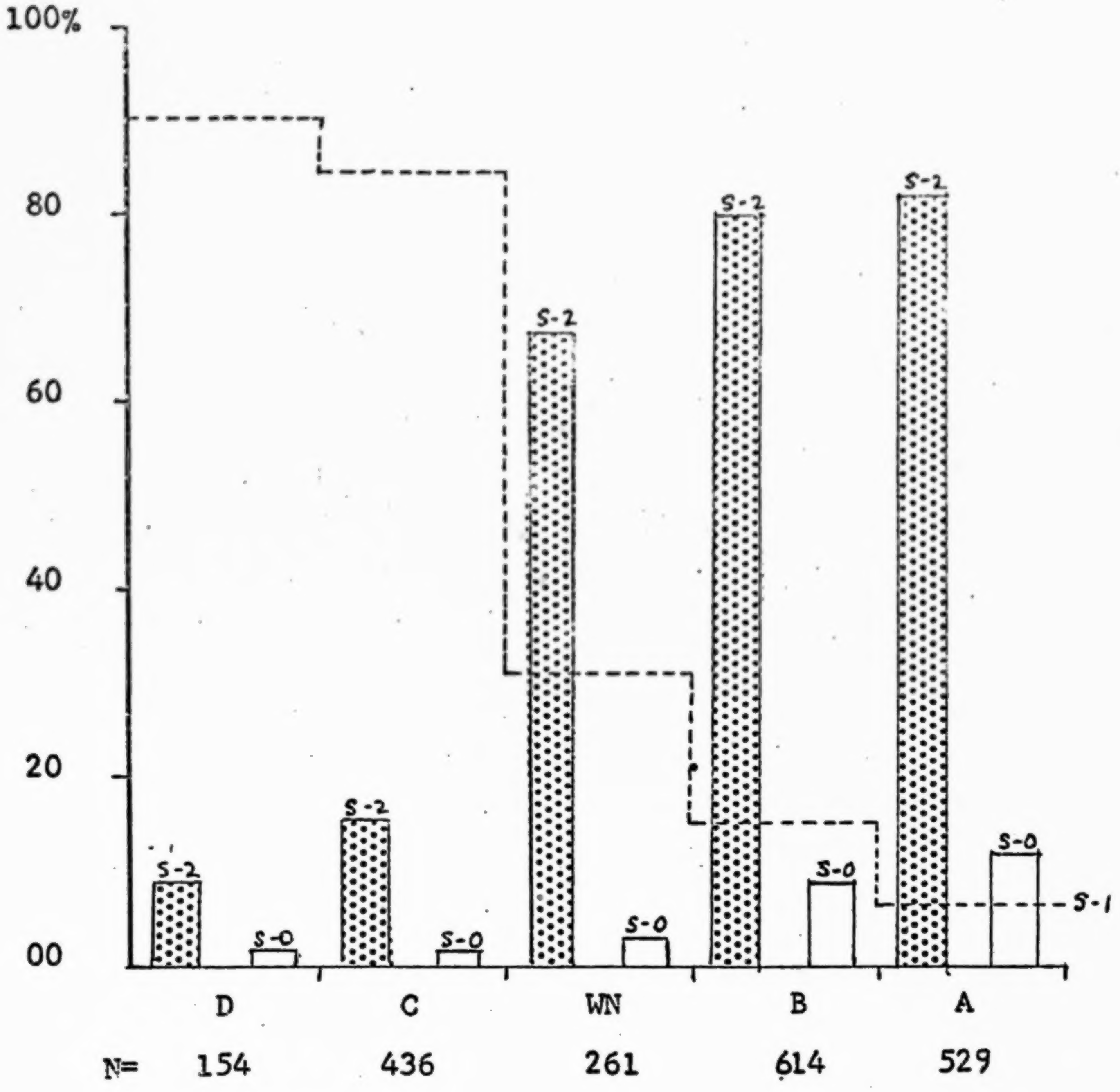


Fig. 5. Stylistic Variation of (SC) in PRS
(Total N=1994)

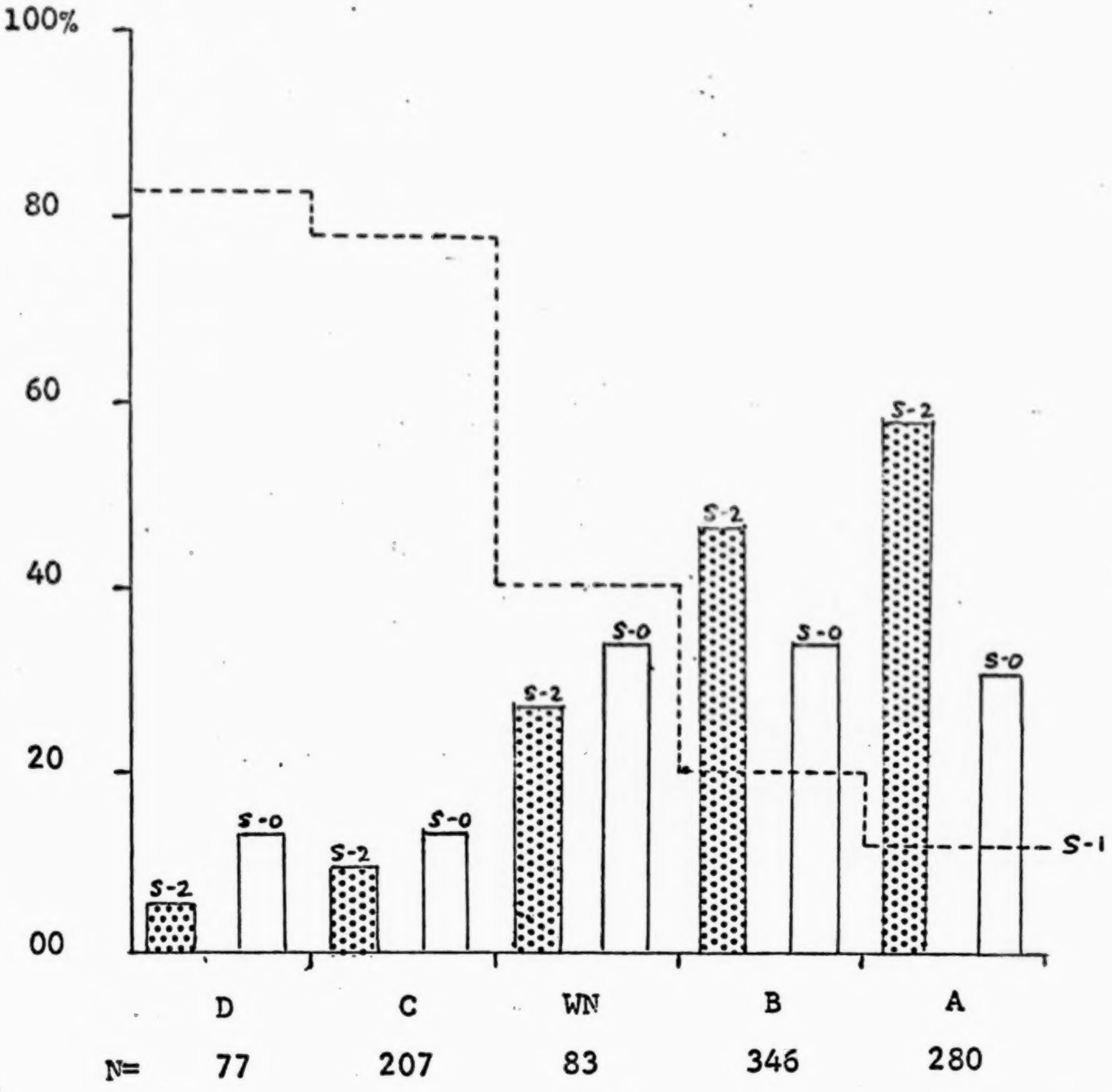


Fig. 6. Stylistic Variation of (S#) in PRS
(Total N=993)

Table 4. (SC) and (S#) Relative Frequency Arrays for 2 Informants

		Informant 125					Informant 150				
	Code	D	C	WN	B	A	D	C	WN	B	A
(SC)	S-1	100	100	78	47	0	100	100	0	7	4
	S-2	0	0	22	53	100	0	0	100	68	72
	S-0	0	0	0	0	0	0	0	0	25	22
	N	4	14	9	13	10	4	12	13	16	27
(S#)	S-1	100	100	---	80	25	100	50	50	8	0
	S-2	0	0	---	20	38	0	50	50	36	67
	S-0	0	0	---	0	37	0	0	0	45	33
	N	2	5	---	10	10	2	4	2	11	6

is younger and was born in an urban coastal city. The first informant is more of an /s/-pronouncer. Yet both exhibit the same pattern of progressive decline in the standard variant with increase in informality which we found for the overall community. In subvariable (SC), value S-1 completely dominates reading styles for both informants, in contrast to their conversational styles, where value S-2 is the most frequent value. Informant 125 never drops her /s/ in words like mismo, estudiante, etc., and in the word-final /s/ class of words, she only drops it in the most casual style. Obviously, informant 150 is more of an [h]-pronouncer even in the more formal reading Style C and she also deletes /s/, i.e., has more value S-0, to a greater extent in the conversational styles B and A. However, she does compare favorably to informant 125 with respect to S-1, but only at lower level of frequency.

We now take a closer look at all the word-final subvariables of (S), which play the most complex part in understanding the structure of this variable. It should be noted that the last six subvariables (see Table 3) are in fact three sets of paired subvariables, since they differ only according to whether the following word begins with a vowel or a consonant. Yet they must be distinguished as sets because each grammatical category with which final /s/ is associated constitutes a separate conditioning factor in the realization of (S). As noted before, final /s/ in Spanish marks the plural inflection for various constituents or grammatical classes belonging to the noun phrase. One of the standard grammatical rules in Spanish is the concord rule, which states that agreement in gender and number holds between the head noun, the determiner, and the attributive adjective.

All determiners (which include possessives and demonstratives, whether singular or plural), always precede the noun; the attributive adjective may or may not. In the case where it does, then it behaves phonologically very much like the determiner. In analyzing the behavior of variable (S), we have had to separate out the two major grammatical classes affecting the realization of the plural marker /s/, i.e., plural nouns from plural determiners or adjectives. Subvariables (Spl) deal with the first class, plural nouns, and subvariables (Sa) deal with the determiners and adjectives. Thus, examples of the noun phrases we are interested in are as follows:

1. los libros
   (S̄a) (S̄pl)

2. muchos libros
   (S̄a) (S̄pl)

In noting the disappearance of final plural markers, Rosario has said: "In many words, particularly in the plurals of nouns and adjectives, there is no sound [i.e., no final /s/] ... except in the memory of the speaker or when the speaker becomes emphatic." (15) In the case of a noun phrase like

3. los tres libros
   (S̄a) (S̄#) (S̄pl)

note that the final /s/ on tres is monomorphemic and is therefore counted under the (S#) subvariable.

We can now refer back to Table 3 to look at the percentage scores for these two sets of subvariables together, since they are so closely related in their phonetic realizations. Taking the phonological conditioning factors first, we note immediately that (Sa#V) is the only subvariable where the standard value S-1 prevails against the stylistic shift and maintains a rather consistently high level of frequency, .81, .61, and .73 in styles C, B, and A, respectively. That it should be so high for Styles B and A might appear to be surprising, since we had previously noted that S-1 generally had a very low level of occurrence in these styles. The reversal here in (Sa#V) can be explained by the fact that the environment of vowel-initial words preceded by final /s/ is a favorable phonetic environment for the retention of that /s/, particularly in its standard [s] realization.[6] Despite the relatively small N observed here, this interpretation is supported by a comparison with (Sa#C), where many more observations of the same grammatical class were made. In (Sa#C), we do see the characteristic lack of the standard value for Styles B and A, which conforms to the overall pattern for (S). Thus the presence of a following vowel vs. a following consonant does play a decisive factor in the behavior of (Sa) subvariables.

Since phonological environment has been shown to override other conditioning factors in (Sa) subvariables, we might expect that the other subvariables with the environment of following vowel might show a similarly high amount of S-1. Our table does not bear out this expectation. (Spl#V) and (Sv#V) in conversational styles have a very low frequency of S-1. We assert that this is due to the fact that grammatical factors, and not phonological factors, are operating here. Of the three possible variants available in (Spl#V),where /s/ marks the nominal plural, value S-0 seems to dominate, 47% and 52% in both these styles. Looking at (Sv#V), where /s/ marks the verbal inflection, value S-2 seems to be the predominant value, with highs of .71 and .62 for these styles. Although all three subvariables (Sa#V), (Spl#V) and (Sv#V) share an identical phonological environment, their radically differential phonetic realizations in styles B and A force us to conclude that the grammatical environments of final /s/ have as great an effect as any other factors on PRS speakers' behavior regarding variable (S) along the axis of stylistic variation.

Another example from our data also points to the importance of grammatical environment as a defining variable for the realization of (S). We note that both noun plural subvariables (Spl#V) and (Spl#C) show the highest amount of value S-0 as the norm of pronunciation in Styles B and A. In these, S-0 occurs with a range from .47 to .62, a relatively high frequency range. This shows that the plural marker on nouns is most often dropped or deleted, i.e., $/s/_{pl} \dashrightarrow [\,Ø\,]$ is a phonological rule in PRS for conversational styles. By contrast, we see that the subvariables (Sa#V) and (Sa#C) show value S-1 (a range of .61 to .73) and value S-2 (a range of .69 to .70) as the highest values, respectively. In other words, the /s/ which denotes plural determiner and adjective is almost always realized phonetically, either as [s] or as [h] (depending on phonological environment, as noted above) and seldom deleted (i.e., a very low frequency of S-0 or [Ø]). Thus the following noun phrases might easily have these pronunciations:

los altos	[los alto]
muchas cosas	[mučah kosa]
tantas amigas	[tantah amiga]
tantas cosas	[tantah kosa]

We can call this phenomenon a reduction of grammatical redundancy. As mentioned before, the standard rule in Spanish grammar states that all articles and adjectives must agree in gender and number with their governing nouns. But we note that once the plural marker has already been marked or realized on the article or adjective, by virtue of the very rule of agreement it becomes "redundant" also to distribute it to the following noun. In the conversational styles, PRS speakers appear to eliminate this redundancy by using a more economical code, hence the common pattern of /s/-deletion on plural nouns. This pattern contributes to the overall impression of words being cut off or shortened at the end, an impression voiced by many of our informants when asked for their subjective attitudes toward their Spanish pronunciation.

The last set of (S) subvariables deals with the final /s/ which is a verbal marker, indicating 2nd person present tense and 3rd person copula "be" or es. As our distribution table shows, we only have occurrences of (Sv) subvariables in the conversational styles, but even here, a pattern can be discerned, namely that value S-2 is the preferred variant. It would have been interesting to see whether /s/-deletion occurred more with the 2nd person marker (as we suspect is the case, given the grammatical redundancy of the subject pronoun tu which accompanies this verbal inflection) than with the copula es, but we did not make such a distinction between these two verbal categories in this study of (Sv) subvariables.

Finally, we might summarize the distribution of variable (S) in its varied phonological and grammatical environments by looking at Figure 7, which shows just the behavior of the standard variant S-1 as it ranges across styles. Only four of the subvariables are presented, but in these, the exceptionless behavior of a declining S-1 is clearly evident. The major break or frequency level is between the reading and speaking styles. In each subvariable, there is a sharp decline in this value between Styles C and WN. A second major decline occurs between WN and the conversational styles B and A. From B to A, there is relatively little difference since B is so close to the lowest possible

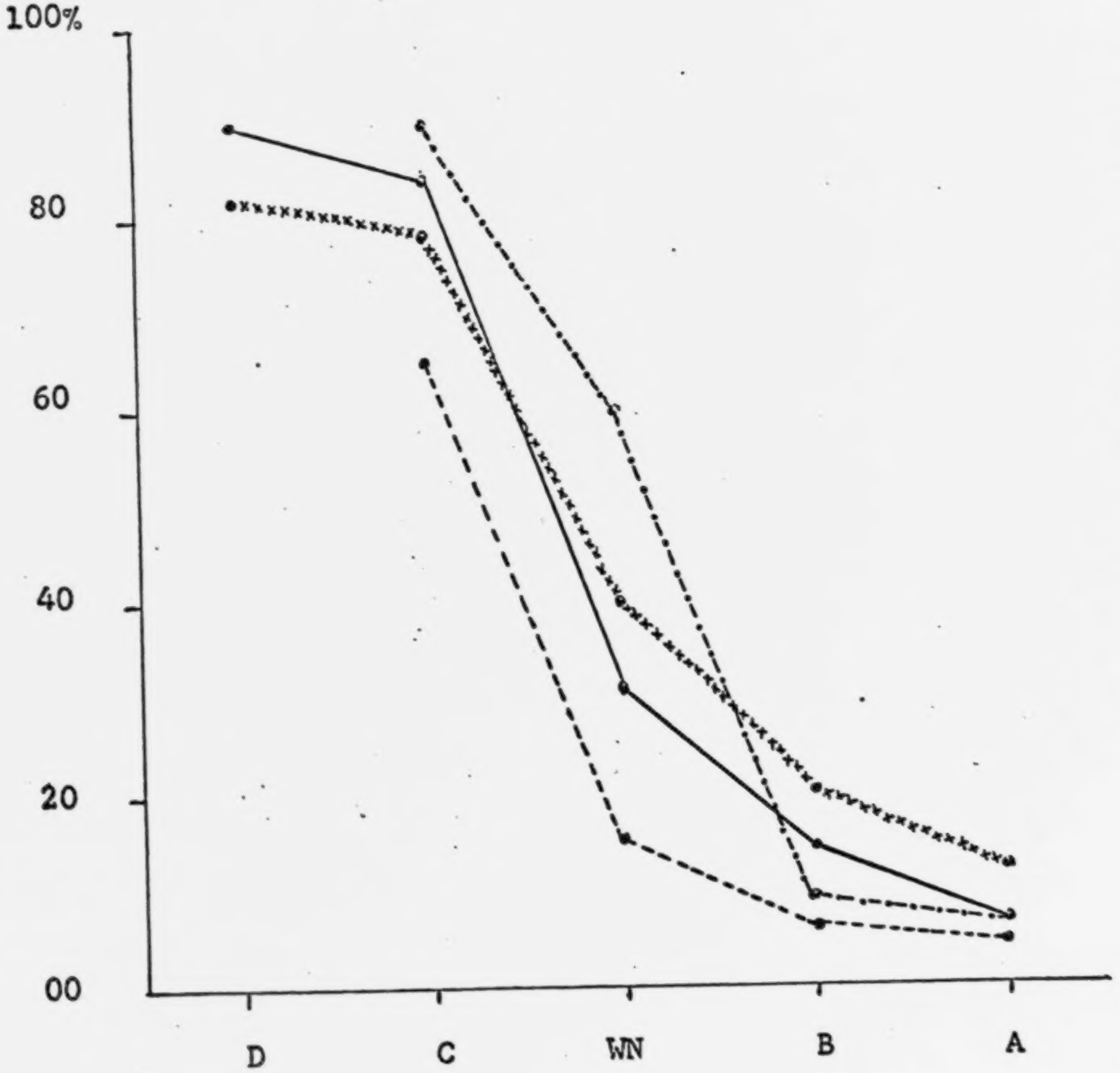


Fig. 7. Stylistic Variation of the Standard Variant S-1 of Variable (S) in PRS

Key to (S) Subvariables:

(SC) ————————
(S#) ××××××××××××
(Spl) —·—·—·—· (averaged from (Spl#V) and (Spl#C))
(Sa#C) ---------

range, but the important fact even here is that B is higher than A. In other words, there is no reversal of our general pattern of decline in the proportion of the standard value. In conclusion, it is an interesting fact that in the list style WN, the subvariables do not cluster around the same relative frequency, in contrast to their behavior in the continuous styles C, B, and A. It reinforces our belief that grammatical as well as phonological conditioning affect the realization of PRS variable (S). Had we not subdivided the variable into its subvariables, we would have missed some important structural facts which influence its behavior under stylistic variation. Our discussion of the variable (S) shows some very intricate and interesting sociolinguistic patterns occurring which reflect both phonological and grammatical considerations. These patterns are widely held throughout our PRS speech community and are norms of linguistic behavior in which its members, to a lesser or greater degree, participate. In Section 8 we will discuss more fully inter-speaker variation and the linguistic variables by which speakers differ as well as the social correlates of these differing groups of speakers.

PRS Variable (RR). The range in phonetic qualities of morphophonemic trilled /rr/ is unique to the Puerto Rican pronunciation of Spanish, according to the accounts of Alonso, Zamora, and Navarro-Tomás, among others. Navarro-Tomás managed to collect as many as 8 different phonetic variants, but he combined them into three main types: apico-alveolar, intermediate alveolo-velar with friction, and velo-uvular fricative. It is the latter velar variant which has aroused the most comment by Spanish scholars. For example, Zamora states, somewhat defensively, that velar /rr/ in Puerto Rico "does not occur as a simple defect or individual aberration, but [is] a collective linguistic habit" (33). Despite the widespread opinion that it is an inferior or vulgar trait in PRS, Rosario states that "the truth is that the velar has currently reached the educated classes in all the towns of the Island and is continually heard in meetings, conferences, and radio-television transmission" (16). Navarro-Tomás relates that children who acquire an acceptable alveolar trill in school are held in admiration by their parents. Regarding the massive and unpredictable fluctuation of variable (RR), he also noted that people in the same social class and same family pronounce variable (RR) in a different manner, although he claims that, generally speaking, velar and alveolar /rr/ are not usually found in the same person's speech (91).

While we originally used Navarro-Tomás' typological classification of (RR) as outlined above, we found that in fact there were very few of the second type in our sample population of PRS speakers. It seems that the intermediate variety is a developed trait only in the more educated and/or San Juan urban speakers. In connection with this, it is interesting to note that in de los Angeles' study of PRS interference in the pronunciation of English /r/, she never shows the velar variant as a possible realization, since all of her speakers were middle-class San Juan residents (97). Thus it is not surprising that our lower-class informants had a very low frequency of this mixed type. Only a little over 5% of all occurrences in all style contexts were realized as this phonetic variant, not enough to enable us to make any quantitative statements about its distribution. This is no doubt due to the fact that /rr/ in general has a relatively low functional load in the total phonological structure of Spanish morphology, as compared to, say, either /s/ or /r/.

We have therefore combined Navarro-Tomás' first two types, giving us the following variants of variable (RR):

Code	Phonetic variant	Description
RR-1	[rr, hrr, ɻ̥̌]	apico-alveolar trill, sometimes pre-aspirated, or retroflex alveolar fricative, varying in amount of voicing; the standard variant.
RR-3	[χ, ɣ]	(post)-velar fricative, generally trilled intervocalically, varying in amount of voicing.

There are two phonological environments where variable (RR) occurs, intervocalically as in carro, ferrocarril, and word-initially, as in ropa, radio. Again, however, due to the low functional load of this sound in our PRS texts, we were not able to get enough quantitative data for each environment alone. By combining the two, however, we have not ignored any unique patterns evident in each environment separately, since in each the general pattern was parallel. With this justification, then, we can now look at the overall sociolinguistic structure of variable (RR), as plotted by percentage scores in Figure 8.

Generally speaking, the standard variant RR-1 decreases progressively along the stylistic axis. There seems to be no major break within reading Styles D and C, though C has just a little less of the standard than D. Between reading and speaking styles, RR-1 goes down from .75 to .55, indicating that difference in medium is an important conditioning factor in the particular realization of (RR), as we have seen is the case in other PRS variables discussed. The unexpected patterns are seen in the increase in the amount of RR-1 in Style B and its extremely sharp subsequent decline to .21 in Style A. Here it is

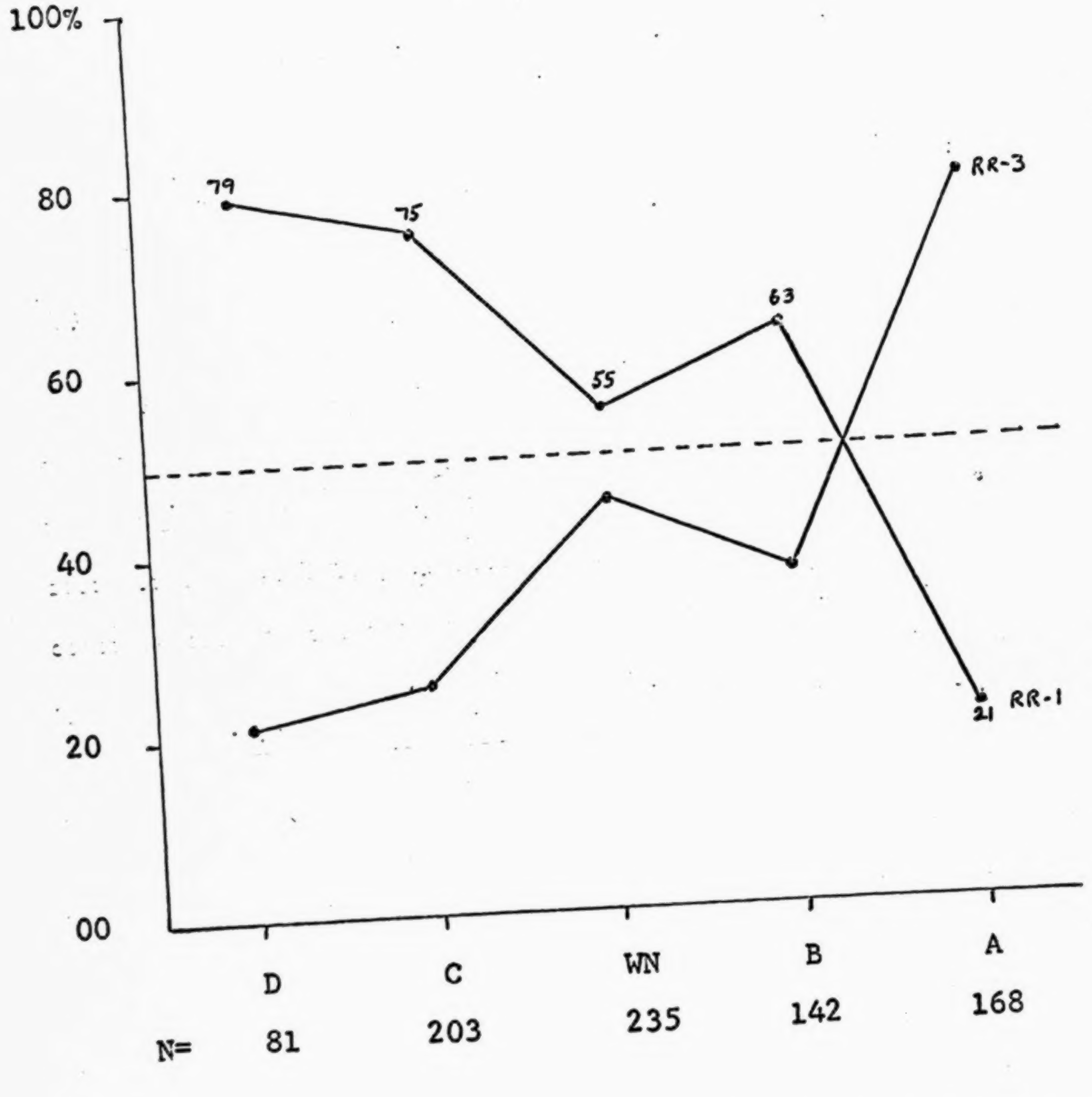


Fig. 8. Stylistic Variation of (RR) in PRS
(Total N=829)

somewhat curious that the amount of cross-over between RR-1 and RR-3 in the most informal style A is exactly of the same percentage as in the most formal D. In other words, where RR-1 had .79 in D, RR-3 now has .79 in A.[7] We can perhaps explain the sharp rise (almost doubled) in the amount of the velar RR-3 from .37 in B to .79 in A by the fact that our interview techniques were such as to effectively include a disproportionate number of primarily Spanish speakers in Style A, whereas more functionally bilingual speakers had been observed only up through Style B.

PRS Variable (D). Another PRS variable which occurs with an even smaller functional load than (RR) is the morphophonemic realization of /d/ in intervocalic position. Although variation of (D) is found in several purely phonological environments, we chose to concentrate only on the morphophonemic environment of the past participle -Vdo (where V is either /a/ or /i/). There are only two variants which occur with much frequency, as follows:

Code	Phonetic variant	Description
D-1	[ð]	voiced post-dental fricative; the standard variant
D-0	[∅]	phonetic zero, i.e., /d/ is deleted

Examples of the word class where this variable is found would be pasado, hablado, venido, which could each be pronounced two ways: [pasaðo/pasao], [ablaðo/ablao], and [βɛniðo/βɛnio], respectively. Variable (D) seems to be one of the more consciously perceived variables in PRS. While other dialects of Spanish also show tendencies to drop /d/ in this environment, Navarro-Tomás indicates that "the care to avoid such a pronunciation, i.e., deletion of /d/ is felt more by the Puerto Ricans than by other Spanish speakers " (60), and later, "The first two considerations which the average peasant relies on to correct the level of his speech is to reinstate the intervocalic d and the aspirated s" (73).

Figure 9 shows the stylistic distribution of variable (D) in PRS. It is quite obvious that the standard variant D-1 decreases steadily across styles. The rate of attrition of D-1 is quite steady from Style D through Style B. The major break in the pattern is found in Style A, the most casual conversational style. Here D-0 crosses over sharply, rising from a level of 27% in B to a level of 57% in A.

The most striking feature of the (D) variable is the consistently high proportion of the standard variant throughout all styles except the most casual. This distribution pattern supports Navarro-Tomás' previously quoted assertion that (D) is one of the most "conscious"[8] sounds for Puerto Rican speakers of Spanish. If we compare this variable with the other variables, we see that in none of these others is the standard variant so persistently retained, not even in the reading styles, as in the (D) variable.

A particular case in point involves one of the items on the isolated word list in Style D. Here we included the slang word escrachao, meaning "in poor condition." It is a purely Puerto Rican (i.e., not regular Spanish) lexeme which seems to have developed from an archaic past participial form originally based on a borrowing from the English verb scratch. Several informants read this word (correctly) as [ɛskɾačao] but quickly "corrected" themselves and repeated it as [ɛskɾačaðo] or, more emphatically, [ɛskɾacado], even though the /d/ was not orthographically represented nor should it have been there.

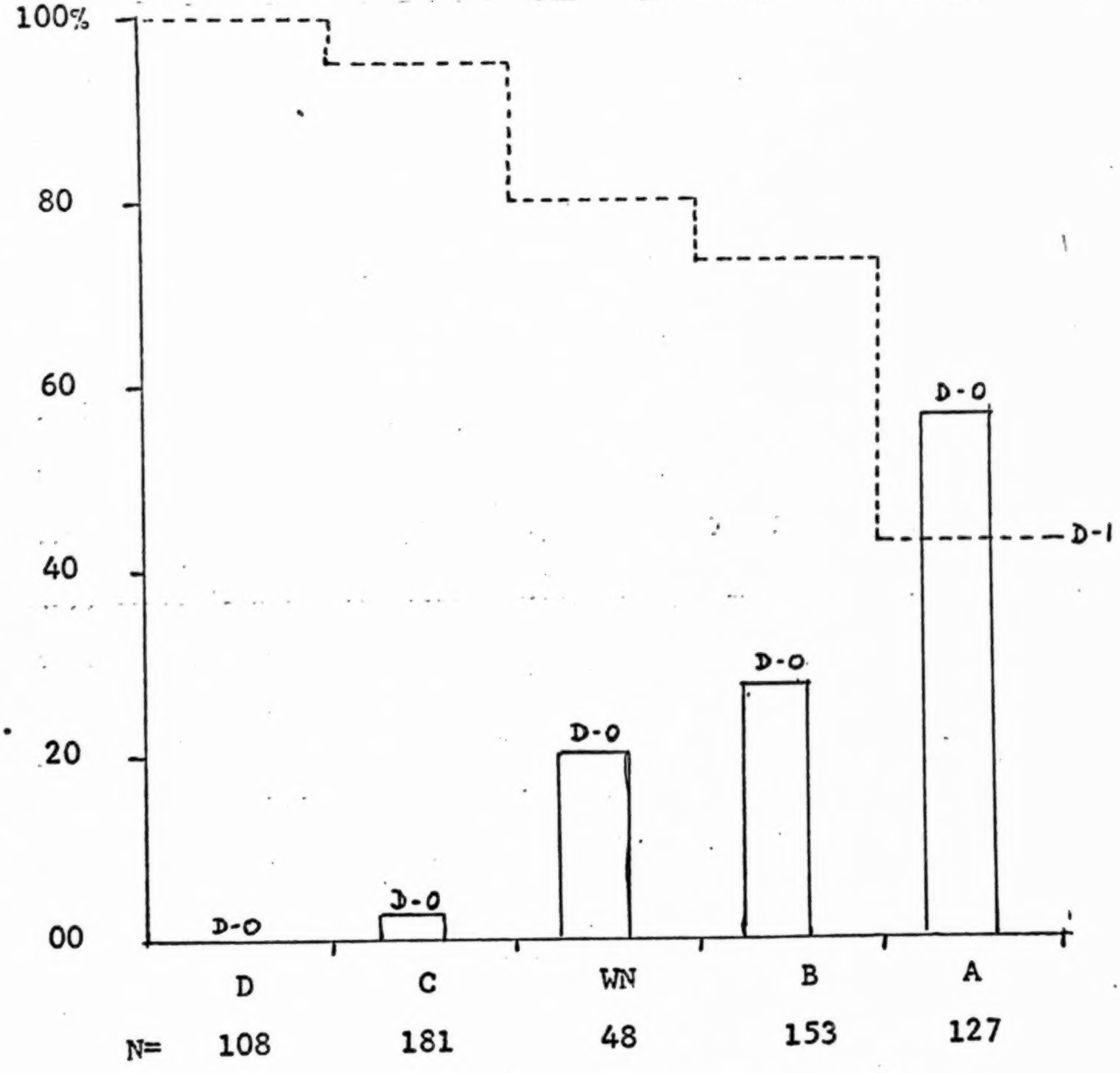


Fig. 9. Stylistic Variation of (D) in PRS
(Total N=617)

That is, these speakers purposely put in the /d/ because they were well aware of its evident parallelism to other past participial forms in which they often deleted the sound in their casual speech.

In conclusion, our findings on variable (D) show that many PRS speakers who use non-standard variants of other variables with regularity in their conversational styles do not necessarily also drop intervocalic /d/, but maintain the standard variant a good deal of the time.

PRS Variable (N) and (VN). Our last two phonological variables in PRS deal with nasal consonants and nasalization. They are perhaps the most weakly developed of all our variables in terms of a sociolinguistic pattern of stylistic variation. The first of these variables, (N), deals with the phonetic quality of word-final /n/. There are three possible variants:

Code	Phonetic variant	Description
N-1	[n]	dento-alveolar nasal; the standard variant.
N-2	[ŋ]	velar nasal.
N-0	[Ṽ]	nasalization of preceding vowel and accompanying loss of nasal.

Although Navarro-Tomás claims that the velar variant N-2 has been almost completely established throughout the Island, our findings indicate that a sufficient amount of variation still exists among our particular group of speakers, enough to be sociolinguistically interesting.

Two phonological environments were studied for variable (N), as follows:

Subvariable	Example	Morphophonemic environment
(N#V)	están allá	word-final /n/ followed by a word beginning with a vowel.
(N#C)	están tristes	word-final /n/ followed by a word beginning with a consonant or final #.

Figures 10 and 11 show the stylistic distributions of both these subvariables across three styles. (Note in Figure 10 that subvariable (N#V) cannot occur in the style context WN.) In Figure 10, we see that the environment of a following vowel is a favorable one for the realization of (N) as the velar variant N-2. Despite the differences in degrees of formality between Styles C, B, and A, value N-2 remains consistently high at 80%, 82%, and 75%, respectively. The standard value N-1, while not high in Style C, does drop about 12% in the conversational styles, as one might expect. In the most casual Style A, the nasal variant N-0 has a higher relative frequency than the standard.

In Figure 11, quite another picture of variable (N) emerges when it occurs in the environment of a following consonant or pause. Here, the standard value N-1 is comparatively higher than the velar N-2 in C. A sharp break occurs between the reading and speaking styles, so that in WN, the standard drops radically from 58% in Style C to 23%, thereafter remaining relatively stable for the conversational styles. N-2 appears to be the norm of pronunciation in WN, dropping sharply in B and A as the nasalized variant N-0 rises. However, the results in Style WN must be considered as quite tentative, due to the extremely small number of observations (N=89) relative to the higher N's found in other styles. In Styles B and A, the proportion of N-2 and of N-0 is twice as great as that of N-1. This indicates that, in

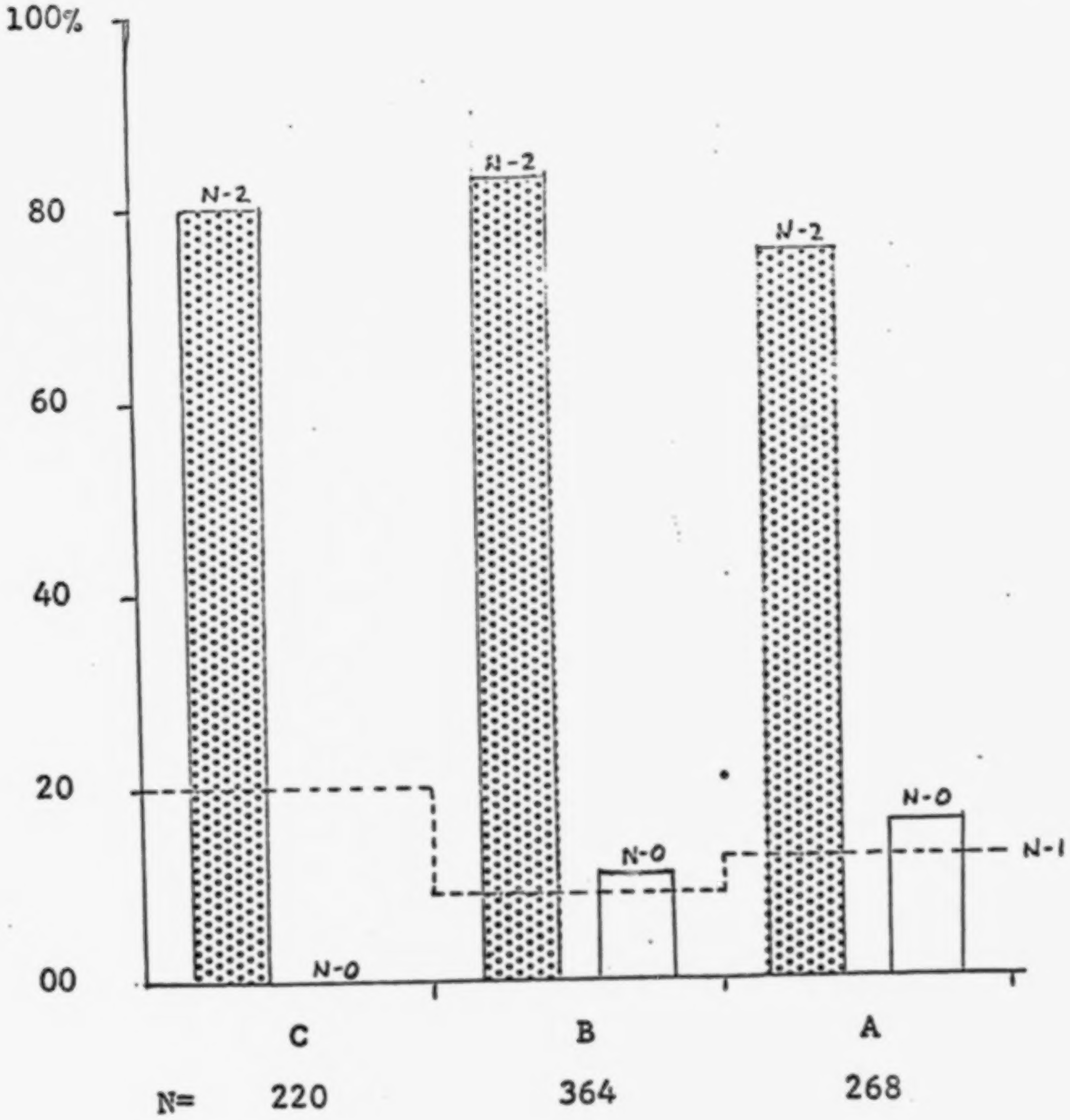


Fig. 10. Stylistic Variation of (N#V) in PRS
(Total N=852)

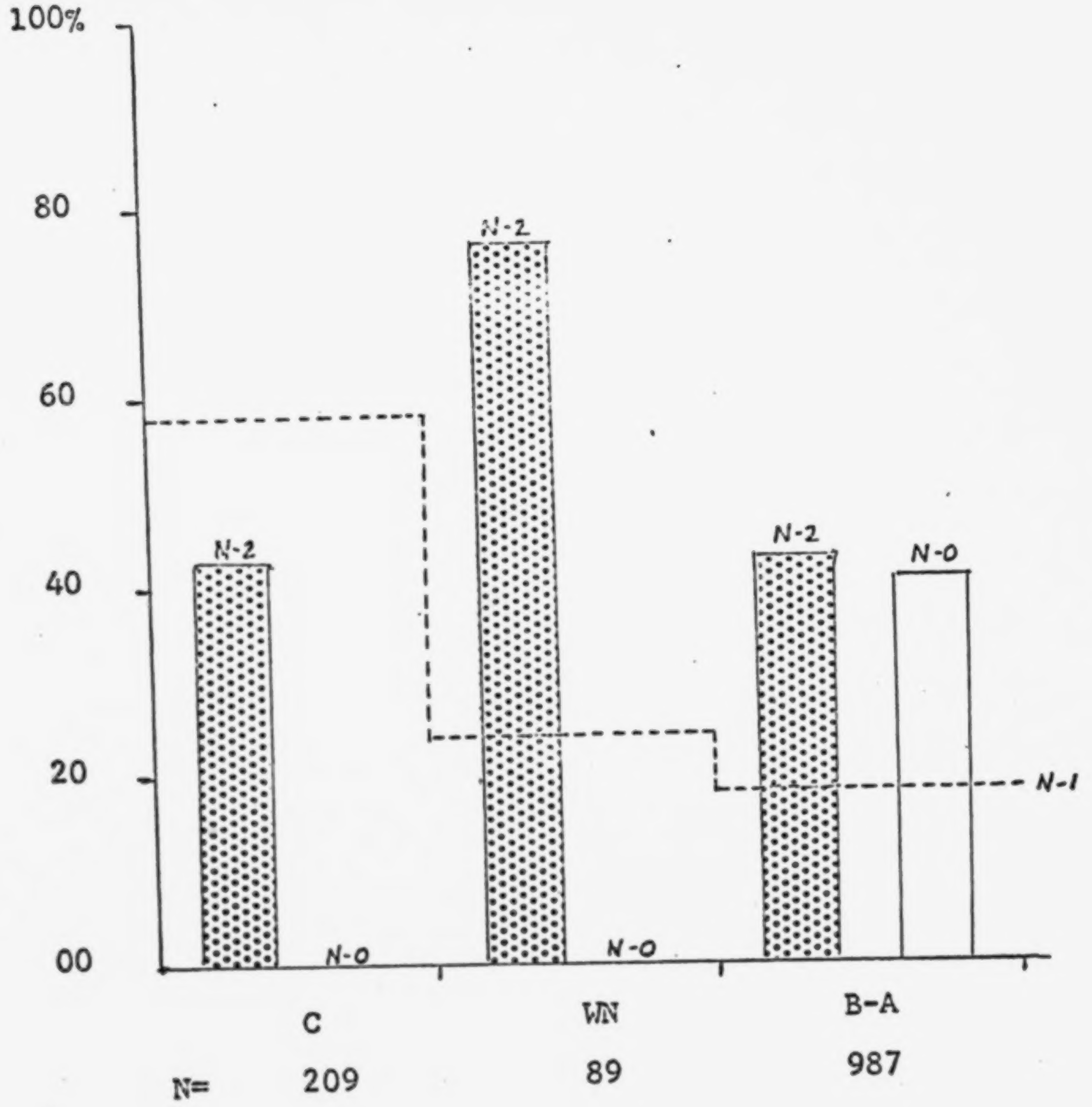


Fig. 11. Stylistic Variation of (N#C) in PRS (Total N=1285)

conversational styles, PRS speakers are more likely to pronounce word-final /n/ followed by a consonant or pause as [ŋ] or [Ṽ]. N-2 is more common for (N#V) than for (N#C). Both figures support Navarro-Tomás' assertion of the dominance of [ŋ] as the norm for PRS. However, they also illustrate the fact that variation does exist in the pronunciations that are realized and that this variation can be profitably plotted against a stylistic continuum, given the proper division of (N) into its phonologically determined subvariables.

Our analysis of the variable (VN) is the most tentative of all our PRS variables and is included here only to show that the results which we did get must be considered at best indicative of a general trend. Navarro-Tomás noted that many speakers often nasalized vowels due to the influence of a contiguous (before or after) nasal consonant. We limited our study to words of the syllable structure ( )VNC( ), that is, word-medial stressed vowel closed by a following nasal. Examples of such words would be ángel, mente, and bomba. The two realizations possible were a non-nasalized variant and a nasalized one. Where both nasalization and nasal consonant were present, this counted as occurrences of the non-nasalized variant. The nasalized variant only included instances where the nasal following was dropped entirely, i.e., a kind of zero variant.

Figure 12 charts the relative frequency of nasalization across four styles. Generally speaking, there is relatively little nasalization in reading Style C and in the most formal of the spoken styles WN, but it rises sharply to an average level of 45% for the conversational styles. This figure thus shows at most only two levels of stylistic contrast, conversational vs. other. However, it reinforces our

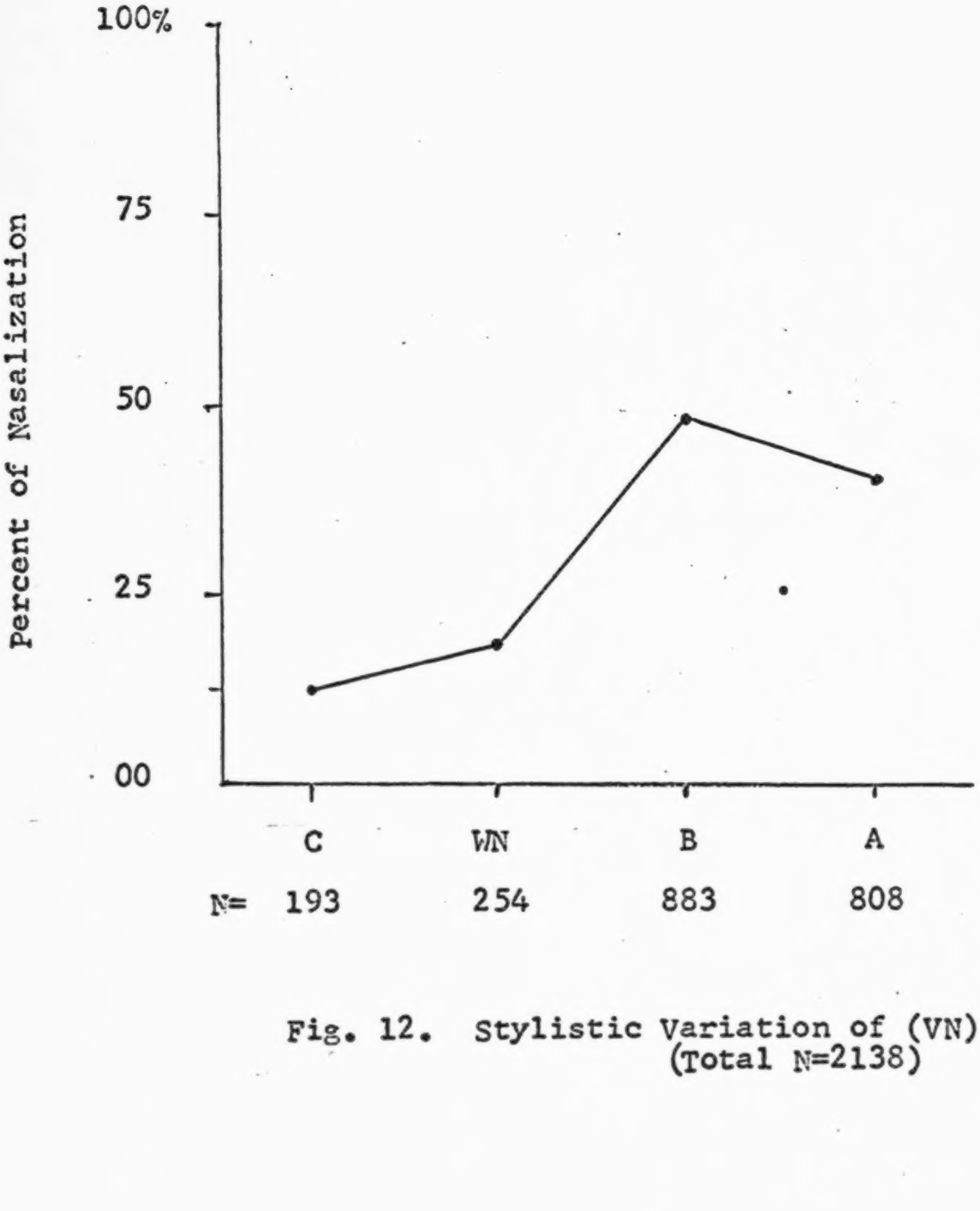


Fig. 12. Stylistic Variation of (VN) in PRS (Total N=2138)

impressions about the existence of a high frequency of nasalization in the natural speech styles of PRS, an impression already well documented above in the structure of subvariable (N#C).

Despite the large N recorded for this variable, the results of (VN) distribution, to our mind, have not been sufficiently illuminating.[9] Further quantitative research might make use of different units of measurement than our study. For example, we suggest that an intermediate value, showing nasalization without deletion of the nasal, could be very useful as an indicator of increasing nasalization. Our current analysis combined instances of (ṼN) with (Ṽ), as opposed to non-nasalized (VN), and the resulting simple dichotomy no doubt contributes to the lack of clarity in the stylistic distribution of (VN) in PRS.

In conclusion, our discussion of the major phonological variables in the PR pronunciation of Spanish has shown some very clear, quantitatively regular distributions of variation along the axis of style (i.e., elicitation context). We have pointed out the importance of distinguishing between phonological and grammatical environments where these variables may occur, since they can differentially affect the realizations of these variables. Finally, we can point out that some distributions of variants may be dichotomous, showing differences only between reading and speaking styles.

Footnotes to Section 4

[1] See Appendix 12.2 of this chapter for a complete list of all variables, phonetic variants, codes, and examples.

[2] Quotes taken from these Spanish authors have been freely translated by us.

[3] For discussing subvariables, the following notations are used: V = vowel; C = consonant; # = word or phrase boundary, with or without phonetic pause; phonemes or morphophonemes are enclosed by slant lines / /; phonetic realizations are enclosed by square brackets [ ].

[4] In all charts and graphs in Sections 4 and 5, the score given for any variant is a relative frequency score, i.e., the percentage obtained by dividing the number of occurrences of the variant by the total occurrences of all the variants of the variable.

[5] An analysis by linguistic subgroups in Section 8 will show that this remaining free variation is due to different group membership.

[6] A very similar situation exists in the pronunciation of word-final _r_ in New England dialect. Speakers will tend to drop the _r_ if the next word begins with a consonant, as in "four feet long" but they will retain it if the next word begins with a vowel, as in "four inches long."

[7] The percentage of .79 in both cases is probably no more than a mathematical coincidence. The important fact is not the actual percentages themselves, but the relatively high vs. relatively low relationship.

[8] I.e., "conscious" in terms of speaker attitudes.

[9] There seemed to be a substantial amount of inter-transcriber variation for this variable. See Section 6.

5. The Stylistic Structure of Puerto Rican English Phonological Variables

The most thorough study of phonological variation in lower-class New York City speech is the 1965 preliminary report by Labov, Cohen, and Robins. We are greatly indebted to them for our choice of the PRE variables considered in our own work, as well as to information taken from the contrastive studies by de los Angeles and Kreidler. However, our speech community was even more diverse than the ones studied by these authors. In our bilingual community, speakers ranged from the younger native-born members who spoke English in a wide variety of social situations to the older non-native residents (some of whom had lived many years in the New York City area) who had a much more restricted social usage of English and used a high amount of non-native English sounds. Consequently, we had to deal with the additional dimension of phonic interference from Spanish to English. This in turn leads to questions of degrees of interference and compartmentalization of two systems, which will be taken up in various places throughout this section.

The presence of interference is handled in our PRE variables as one of the phonetic variants. In particular, vowel variables always contain one value which is generally identifiable as the PRS phonic equivalent (henceforth interference variant) of the PRE sound. By phonic equivalent, we do not mean that they are necessarily phonetically equivalent; in some cases, they are not. Phonic equivalence means matching or identifying as nearly as possible the sounds of one language with the sounds of another (one of the definitions of "interference" given in the introduction). For example, Spanish initial t differs from English initial t by both a lack of aspiration and by a more dental as opposed to alveolar articulation, but it is used by Spanish speakers as the equivalent of the English sound. On the other hand, Spanish [ɔ] is almost identical to the English short [ɔ]. In both cases, we can call the Spanish sounds "phonic" equivalents, hence interference equivalents (or variants). It is when phonic equivalents are phonetically unmatched that "accent" becomes noticeable. The term "interference" in its most general sense usually applies to phonetically unmatched equivalents.

The potentiality for (unmatched) interference is greatest in the sound systems of stressed Spanish and English vowel nuclei, partially compared in Figure 13. It is obvious from this figure that some of the elements in the smaller Spanish inventory are in a one-many equivalence relationship to elements of the larger English system. For example, Spanish [a] is used for both English [æ] and [a]. Since vowels are among the most interesting variables to study in the speech of New York City English (see Labov, 1966a, 1966b), the presence of interference greatly complicates the distributions of stylistic variation.

In each of the four PRE vowel variables to be discussed below, we originally distinguished two environments, stressed vowels before a voiced or a voiceless consonant. However, this difference, while productive for other English speakers, did not seem to produce any effect on the vowel realizations of our Puerto Rican speakers. We have therefore only one generalized index for each vowel variable. Each can occur in either open or closed syllables.

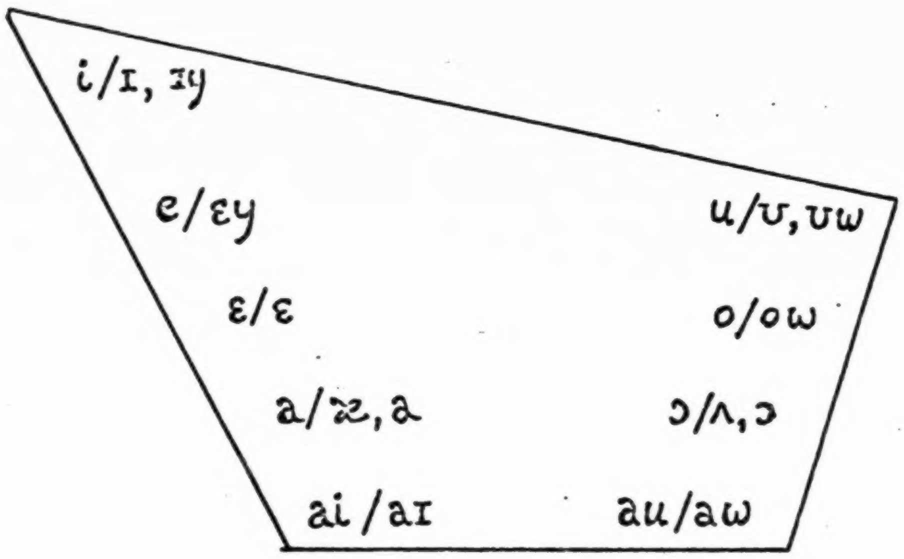

i/ɪ, ɪy
e/ɛy
u/ʊ, ʊw
ɛ/ɛ
o/ow
a/æ, a
ɔ/ʌ, ɔ
ai/aɪ
au/aw

Fig. 13. Some Spanish/English Equivalents of Stressed Vowel Nuclei (Spanish to the left of slant line)

PRE Variable (UH). The first PRE variable to be discussed is called (UH). This involves the height and rounding of the vowel in the word class luck, bus, mother, under, mud. While this variable is not generally considered social or stylistically significant in New York City English, it is so for Puerto Rican speakers of New York City English.

There are three phonetic variants of (UH), forming a scale from lower to higher vowel, as follows:

Code	Phonetic variant	Description
UH-1	[a,ɑ]	low unrounded back vowel
UH-2	[ʌ]	mid central unrounded vowel; the standard variant
UH-3	[ɔ]	mid back vowel with open rounding; the interference variant

Confusion between values UH-1 and UH-2 might result in pairs like cot/cut or calm/come becoming homophonous. Confusion between values UH-2 and UH-3 would result in the merger of such pairs as thud/thawed buddy/body, and tuck/talk.

Figure 14 shows the distribution of (UH) through all styles. It is seen that the standard variant UH-2 predominates throughout, being relatively lower in reading Styles D and C than in the other styles. By contrast, the interference variant UH-3 is generally higher in the reading styles and somewhat lower in the other styles. Against these two values, UH-1 maintains a rather steady level, ranging from 5 to 10% occurrence for all styles. We can note that a merger of, for example, lunch/launch appears most likely to occur in the formal reading styles; compare the almost identical relative frequencies of

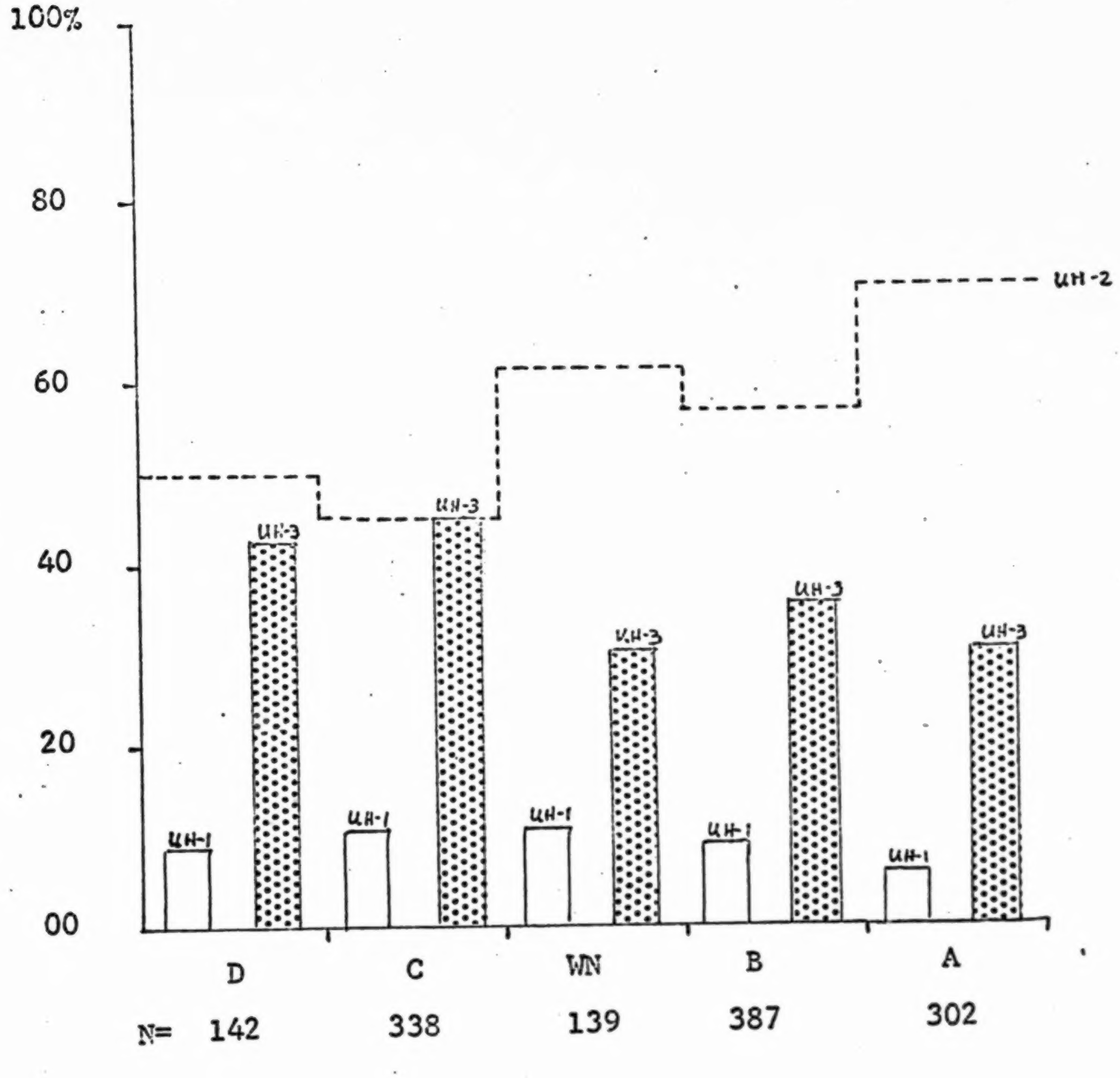


Fig. 14. Stylistic Variation of (UH) in PRE
(Total N=1408)

UH-2 and UH-3 in D and C. In general, the patterns of variation in (UH) seem to indicate that the difference between reading vs. speaking style is probably the most important conditioning factor for its differential realizations.

PRE Variable (EH). Variable (EH), as Labov has pointed out, is one of the most crucial ones in the evolution of the vowel structure of New York City English. This vowel deals with the height of the vowel in the word class bad, hanging, pack, glass. Here, we are concerned with the initial portion of the vowel and not with any offglides or vowel length which are often present. For PR speakers of English, it is, like (UH), a difficult sound to make, since there is no structural equivalent in the Spanish system; phonic interference is widespread and fluctuates considerably.

There are three phonetic variants for PRE (EH), forming a scale from higher to lower vowel sounds.

Code	Phonetic variant	Description
EH-1	[ε, $ε^{ə}$, I, $I^{ə}$]	upper mid to high front vowel with or without central offglide
EH-2	[æ, $æ^{\perp}$]	lower mid front vowel, may be long or short; the standard variant
EH-3	[a]	low front vowel; the interference variant

In Figure 15, we see the stylistic distribution of this variable. While it does not seem to show any regular shift by variants across style, we can note a few trends. The highest (in terms of vowel height) variant EH-1 is present in substantial amounts (an average of 19%) across all styles, but has no defined increase/decrease pattern. This contrasts with Labov's findings for white native New York speakers,

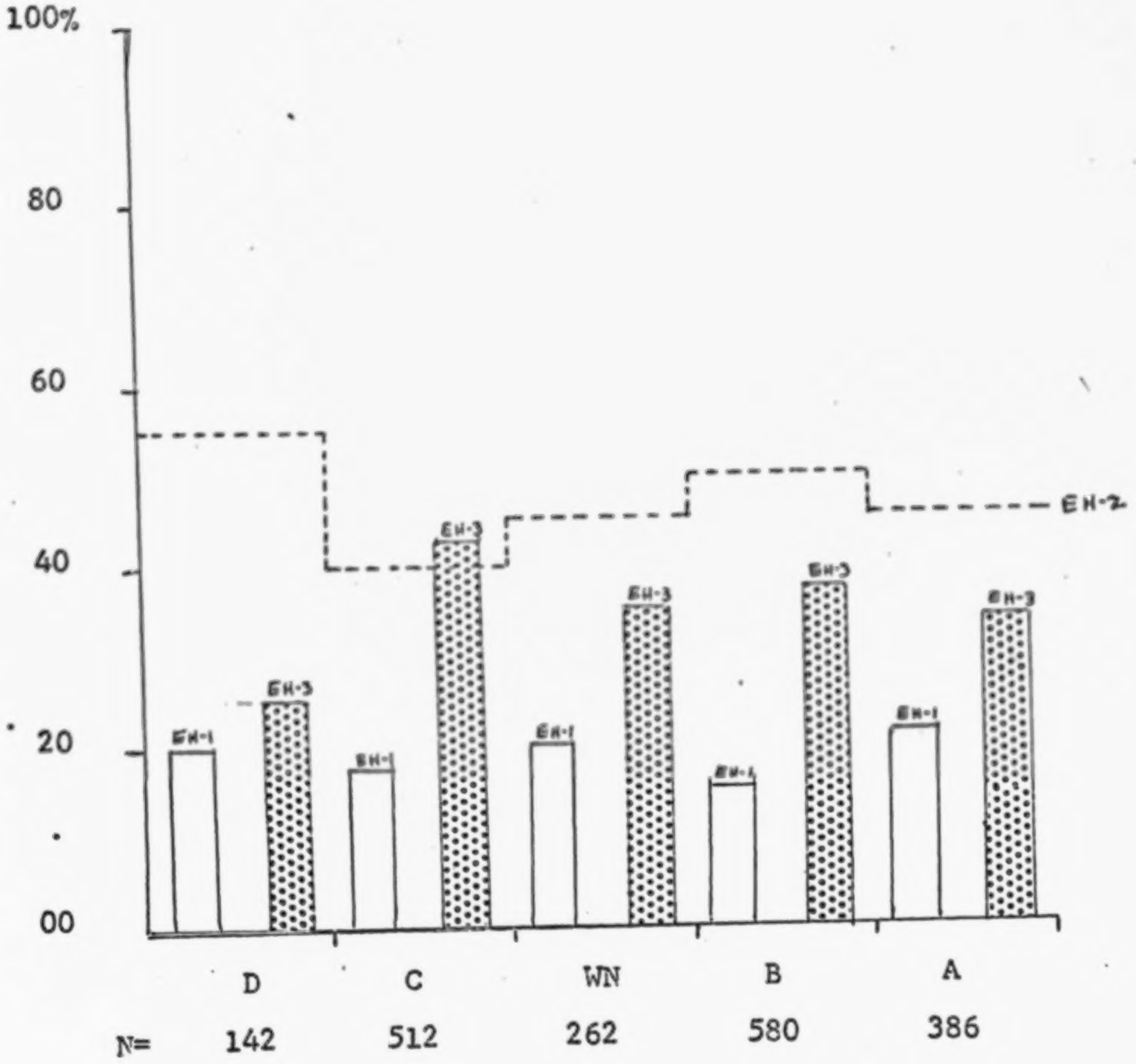


Fig. 15. Stylistic Variation of (EH) in PRE
(Total N=1882)

where he found a steady progression toward higher variants with increased speech informality. Of course, our patterns cannot be expected to be the same, since we are dealing with a recently emigrated subpopulation of New York City speakers, only some of whom are native speakers. We would thus expect a greater amount of fluctuation as opposed to patterned variation for such speakers. The standard value EH-2 or [æ] is the predominant variant across all styles except C, where the interference equivalent EH-3 is equally preferred. The cross-over pattern in this style indicates that words like cat/cot and rack/rock may likely be pronounced the same. In Sections 7 and 8 of this study, we will be able to show that variable (EH) patterns are more discernible when studied by separate subgroups of our population.

Structural and Stylistic Parallelism of (EH) and (UH) in PRE. We pointed out in the discussion of variable (UH) that it was in Style C where phonetic merger between (UH) variants would be likely to take place. Now we see in variable (EH) that homophony is also to be expected in Style C. In other words, in this reading style, PRS speakers of English are most apt to confuse the distinctions between cut/caught (UH-2/UH-3) and cat/cot (EH-2/EH-3). In each variable, the [ɔ] for (UH) and the [a] for (EH) is the preferred variant. Perhaps this might be a case of "hypercorrection" where speakers thought they were reading the "correct" values corresponding to the orthography. For example, many words are spelled with "o" but are pronounced as [ʌ], as in "brother, enough."

We already noted in Figure 13 that these two sounds are the phonic equivalents most frequently substituted for English [ʌ] or [ɔ] and [æ] or [a], respectively. In Figure 16, depicting (UH) and (EH) in phonological space, we can confirm that these variables are

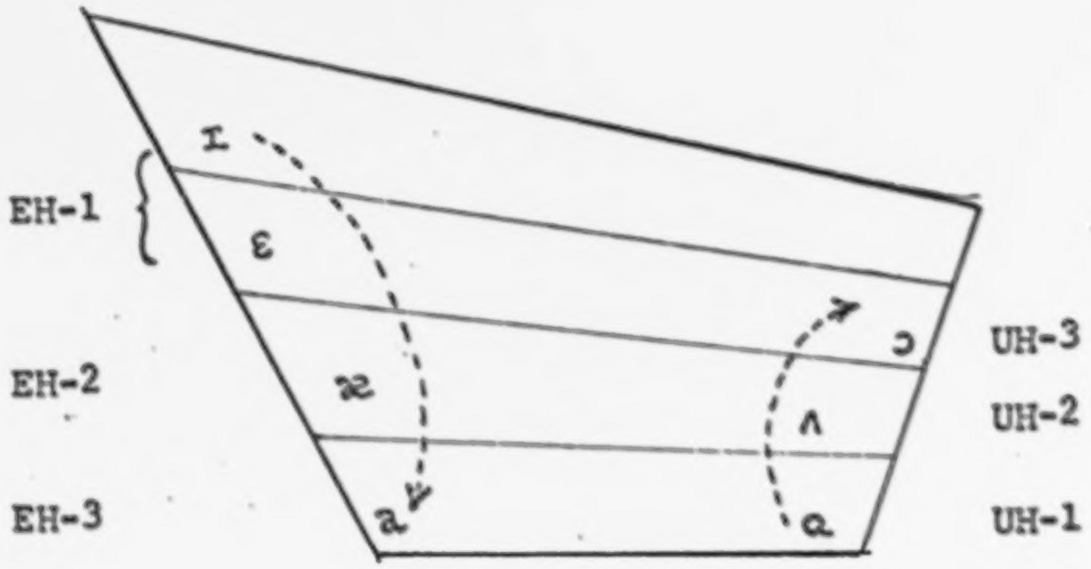

EH-1
EH-2
EH-3
UH-3
UH-2
UH-1
ɪ
ɛ
æ
a
ɔ
ʌ
a

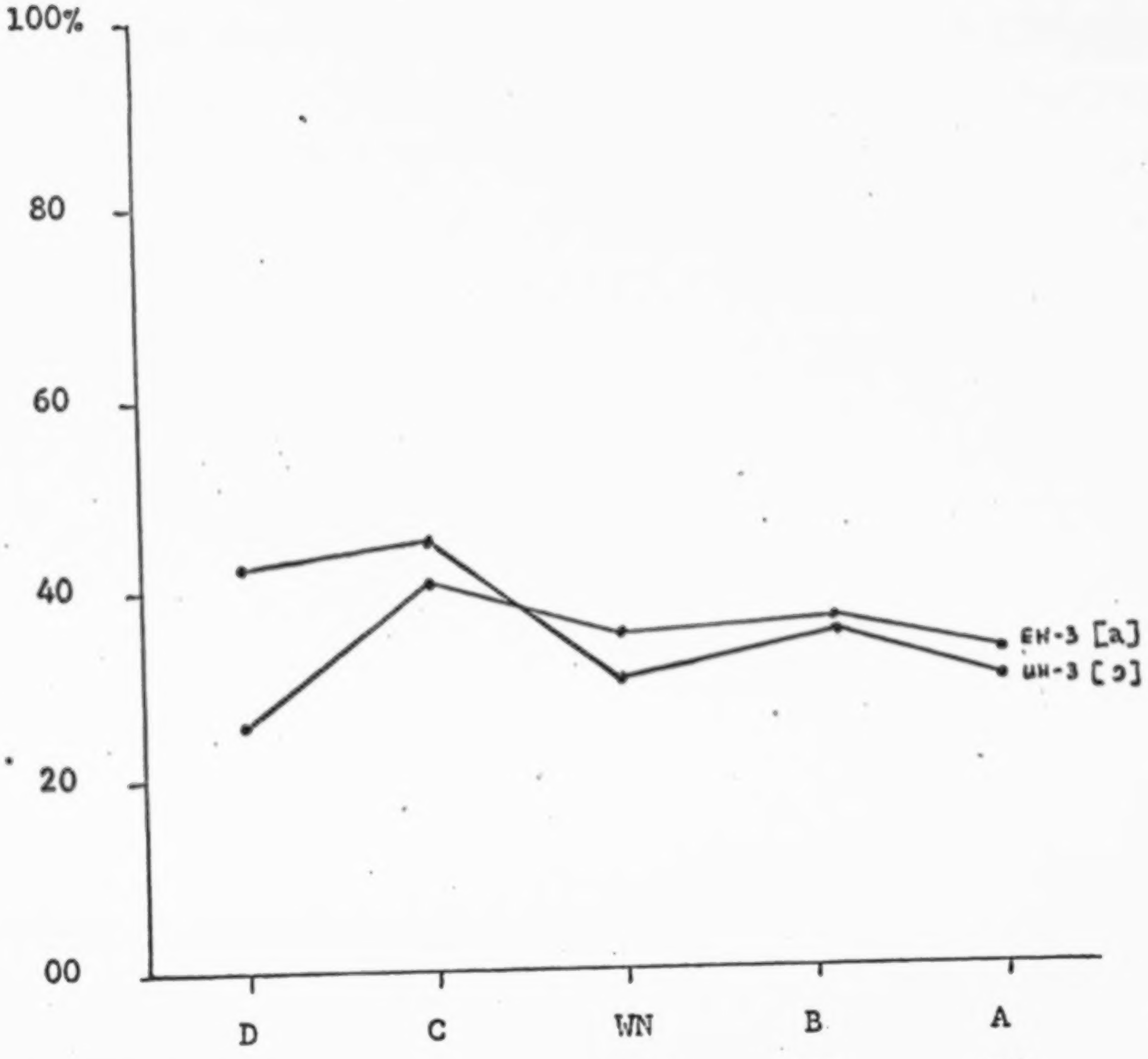
Fig. 16. Structural Parallelism of (EH) and (UH) in PRE

indeed structurally parallel. Both deal with lower mid target areas whose articulation ranges vary from a low open vowel to a higher front one in the case of (EH) and from a low open vowel to a higher back one in the case of (UH). The direction of the arrows shows that if a lower variant is used for (EH), then a higher one is used for (UH), thus maximizing the phonological distance between these two vowel areas.

Because of this structural parallelism, then, it perhaps not coincidental that the interference variants EH-3 and UH-3 are the preferred variants in the formal Style C. Furthermore, it can be shown that these two interference variants are in fact stylistically parallel not just for Style C, but for all our styles.

In Figure 17, we see that they form a like pattern of movement in addition to sharing very similar relative frequencies. In the reading styles, the frequency of D is relatively lower than C. In the oral styles, each variant is relatively higher in B than in either WN or A. Although the slope of the curves for each variant is admittedly small in these latter styles, it is an inescapable fact that they have parallel movements at exactly the same shift points in style. After our discussion of the next two vowel variables, we will return to the stylistic distribution of interference variants in PRE.

PRE Variable (OH). This variable deals with the height of the vowel in syllables of the structure CVC( ) for words of the class talk, all, dawn, and four. As before, vowel length has not been considered a significant dimension for our phonetic variants, which are as follows:



Total (UH) N= 142 338 139 387 302
Total (EH) N= 142 512 262 580 386

Fig. 17. Stylistic Parallelism in the Interference Variants of (UH) and (EH) in PRE

much smaller (N=729) than for other variables and hence less reliable. b) Differentiation of (OH) as a subvariable before postvocalic r from any other environment would have been useful, since raising of (OH) in many speakers automatically co-occurs with loss of this r (as in the words four, fork, board). Finally, c) a more refined scale which separated [ɔ] from a variant plus glide [ɔ^{ə}] would have been useful for our study, since, as we pointed out, [ɔ] presents no difficulty for PR speakers whereas [ɔ^{ə}] is definitely indicative of a greater sensitivity to stylistic shifting in the English of New York City.

PRE Variable (AY). Variable (AY), according to Labov et al. (1965b) has great social and stylistic significance for both Negro and PR speakers in New York City. It deals with the height of the vowel nucleus of diphthong in such words as like, my, ride, trying. We have greatly simplified the phonetic dimension of (AY) suggested by Labov and have rated our variants only according to height of the initial element and the length of the upglide, as follows:

Code	Phonetic variant	Description
AY-1	[a]	low fronting of first element and loss of upglide
AY-2	[aI]	low fronting of first element and short upglide; the standard variant
AY-3	[ai]	low fronting of first element and longer, fronter upglide; the interference variant
AY-4	[ɑI, ɑi]	low retracting of first element and long/short upglide

It should be pointed out that variants AY-2 and AY-3 are quite similar phonetically, the biggest difference being the length of the upglide,

Code	Phonetic variant	Description
OH-1	[o, oᵊ]	mid high rounded back vowel, which may or may not be accompanied by a central offglide
OH-2	[ɔ, ɔᵊ]	a mid open rounded back vowel, with or without offglide; it is both the standard variant and the interference variant
OH-e	[ɒ].	a low open rounded back vowel

As we pointed out in Figure 13, PRS speakers have no difficulty in pronouncing English [ɔ] since they have a very similar (though perhaps more rounded) sound in Spanish in words where the vowel occurs in a closed syllable, i.e., words of the structure (C)VC( ) as in *olvidar*, *corto*, *montaña*. They would automatically use this sound in similarly structured words like English *always*, *court*, *laundry*.

Figure 18 shows the stylistic distribution of these three variants of (OH) in four styles. We can see immediately that OH-2, the standard/interference variant, shows an overall decrease accompanying increasingly informal styles, as expected. The high vowel variant, OH-1, is substantially more frequent in the spoken styles, where it has a relatively stable frequency of occurrence. This would confirm Labov's findings that the lower social classes in New York City (to which our PR population belongs) have a consistently higher (OH) variant in their spoken styles (ranging from [ɔᵊ] to[ʊ] with or without offglide). Also noted is the steady increase of the low variant OH-3 or [ɒ] from 6% in WN to 28% in A. Why this should be so is not necessarily evident, if Labov's contention is true that it is the upwardly mobile or lower middle classes which show an increase of lower (OH) variants in casual speech.

In any case, our findings for (OH) are not altogether satisfactory, for three reasons. a) The evidence for it is quantitatively

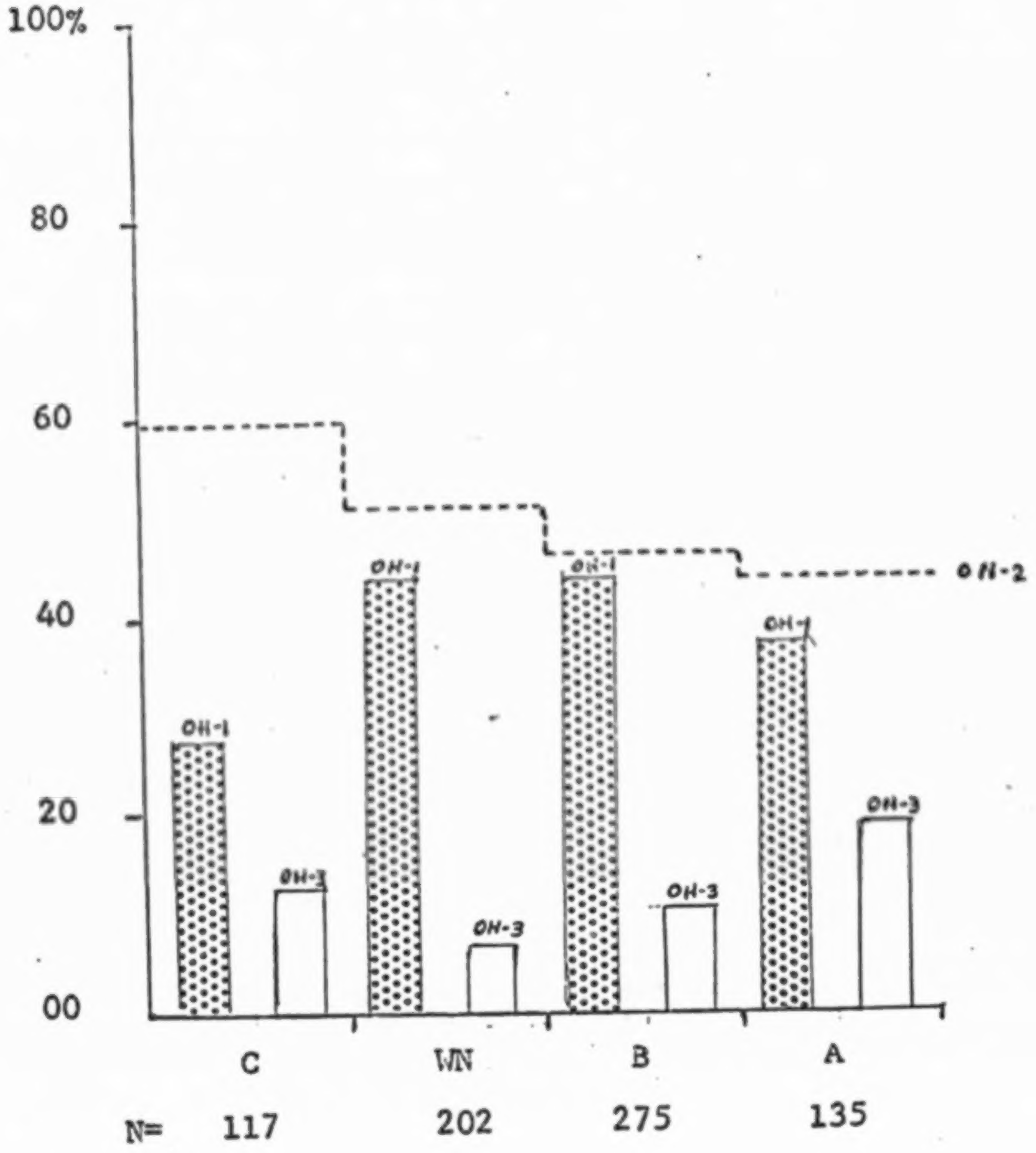


Fig. 18. Stylistic Variation of (OH) in PRE
(Total N=729)

a shorter, slower glide in English [aI] and a longer, faster one in Spanish [ai] (see Stockwell _et al._, 1965).

We originally studied this variable (AY) in three different phonological environments, in syllables closed by a voiced or voiceless consonant, and in morpheme/word final position. However, results are only clear for the latter environment. Figure 19 shows the stylistic distribution for subvariable (AY#) in C, B, and A, all styles featuring continuous texts (materials on the word list styles D and WN were quantitatively insufficient for present analysis). Here, we note that the interference variant AY-3 predominates across all three styles and shows a patterned decrease with increased informality. Likewise, the standard AY-2 also decreases systematically from C to A, as expected. Variant AY-1 increases rather dramatically from reading to speaking (25%) and also increases from careful speech B (at 30%) to casual speech A (at 39%). This variant is certainly one of the most characteristic of urban lower-class Negro speech. Its high occurrence in the speech of acculturating urban lower-class Puerto Ricans attests to the presence of a high amount of social interaction between the two ethnic groups.

Stylistic Variation of Interference Variants. We conclude our discussion of PRE vowel variables by a summary analysis of our interference variants. In our introduction (644-646), we reviewed the notion (of Weinreich, Haugen and Mackey) that interference itself can be subject to patterned and quantitatively definable variation according to such changes in the speech situation as media, style, topic, etc. In each of our discussions of the four PRE vowel variables, we noted that

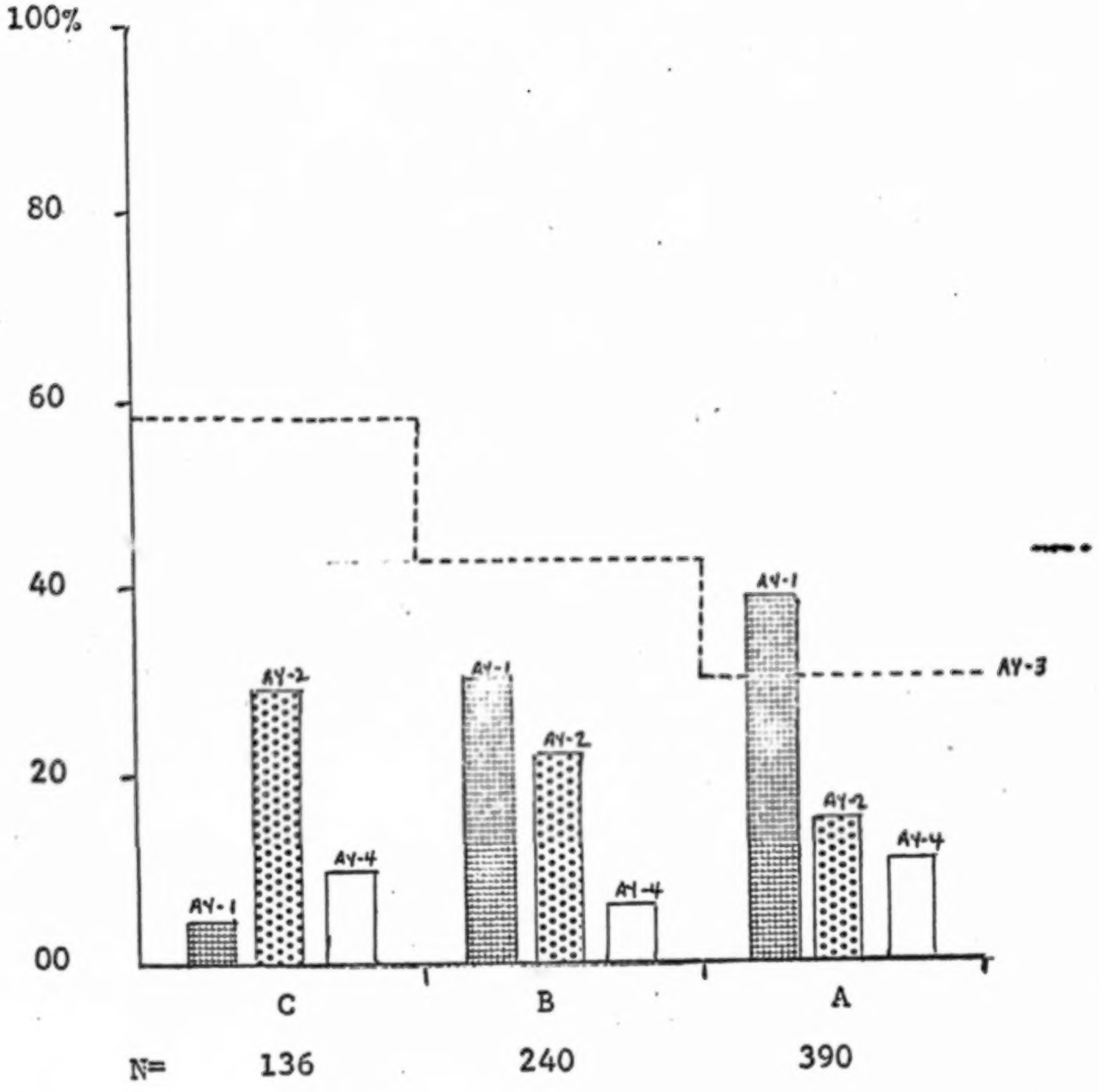


Fig. 19. Stylistic Variation of (AY#) in PRE for Continuous Text Styles (Total N=766)

there was always one variant in each variable which was considered the phonic equivalent to the variable, which we called the interference variant. We can now look at the patterning of these interference variants to see if they indeed vary with style or medium as defined in our study.

Figure 20 displays the interference variants of these variables for continuous text Styles C and combined B-A, i.e., the difference of style between reading connected texts and speaking in continuous discourse. In each case, we can see a definite pattern of decreased usage of the interference variant from the more formal Style C to the less formal B-A styles. In OH-2, it is a difference of 15%, in AY-3 of 22%, in UH-3 of 12%, and in EH-3 of 8%. We can analyze this further to see whether any differences exist between careful B and casual A speech styles. Figure 21 shows that a consistent difference can still be seen for all interference variants. Even though the differences between relative frequencies are not quantitatively great, the fact that they decrease from B to A without exception is quite remarkable. Figures 20 and 21 thus illustrate that both medium as well as topic of discourse are contributing factors in the stylistic distribution of interference phenomena in the speech of New York City PR bilinguals.

The next three PRE variables are all consonantal and their analyses are consistent with the findings of Labov (1965) for lower-class New York City speech.

PRE Variable (R). Many studies have been made of variable (R) in American English, both for geographical as well as social variation;

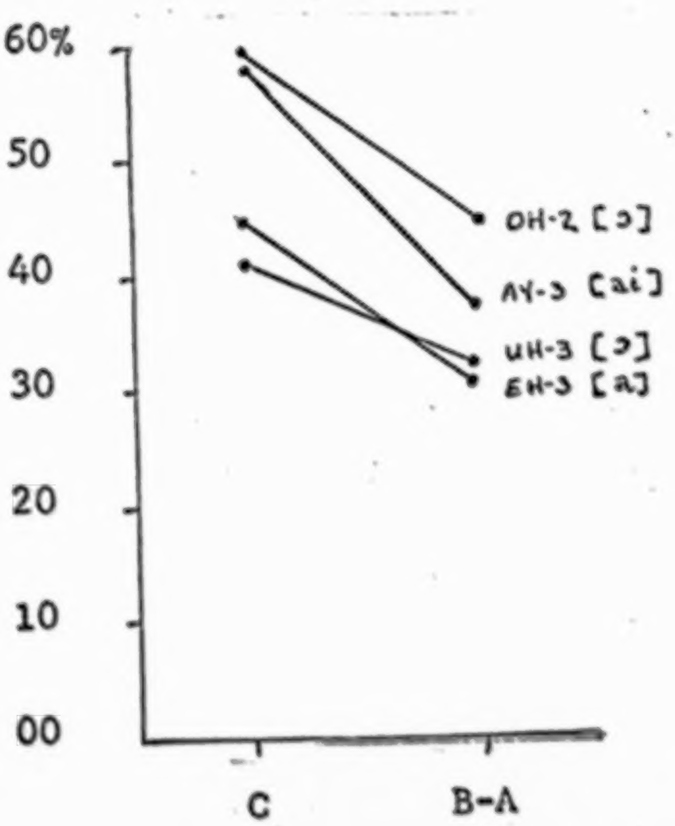


Fig. 20. Stylistic Distribution of Phonic Equivalents (Interference Variants) of Four PRE Vowel Variables in Two Styles of Continuous Texts

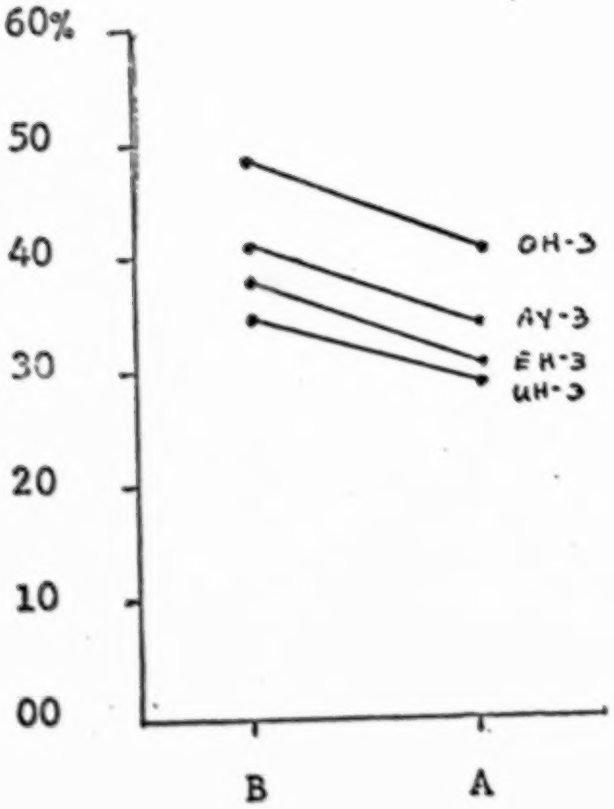


Fig. 21. Stylistic Distribution of Four PRE Interference Variants in Careful vs. Casual Speech

see for example McDavid (1948), Levine and Crockett (1966), and Labov (1965b, 1966). As with these past studies, we are interested in the degree of r-lessness in two phonological environments, preconsonantal and post-vocalic or word-final, called subvariables (RC) and (R#), respectively. We originally separated final /r/ followed by vowel-initial word from final /r/ followed by a consonant or pause, since previous studies had shown that the first environment is a favorable one for r-retention. However, our study did not show more r-retention before vowels than before consonants, partly because our corpus did not contain enough occurrences of the vocalic environment. Therefore, our (R#) subvariable is a generalized subvariable for all word-final r.

There are two phonetic variants, coded as follows:

Code	Phonetic variant	Description
R-1	[r, ɾ, ɚ, ʳ]	any degree of constriction present, including flap [ɾ] even though it is phonetically quite dissimilar from the other realizations; the standard variant
R-0	[ə, ∅]	complete absence of constriction, often replaced by a glide and/or lengthening of preceding vowel

We have combined instances of the interference equivalent flap [ɾ] with the R-1 value since a separate tabulation of this sound vs. all other R-1 sounds yielded a count too small for quantitative analysis as a separate interference variant.

Figure 22 displays the stylistic variation for subvariable (RC) for three styles. The standard R-1 predominates across all styles, but there is systematic decrease across the stylistic axis, from 72% in D-C to 53% in B-A. We can compare these results with Figure 23, which shows the distribution of subvariable (R#) in these same styles.

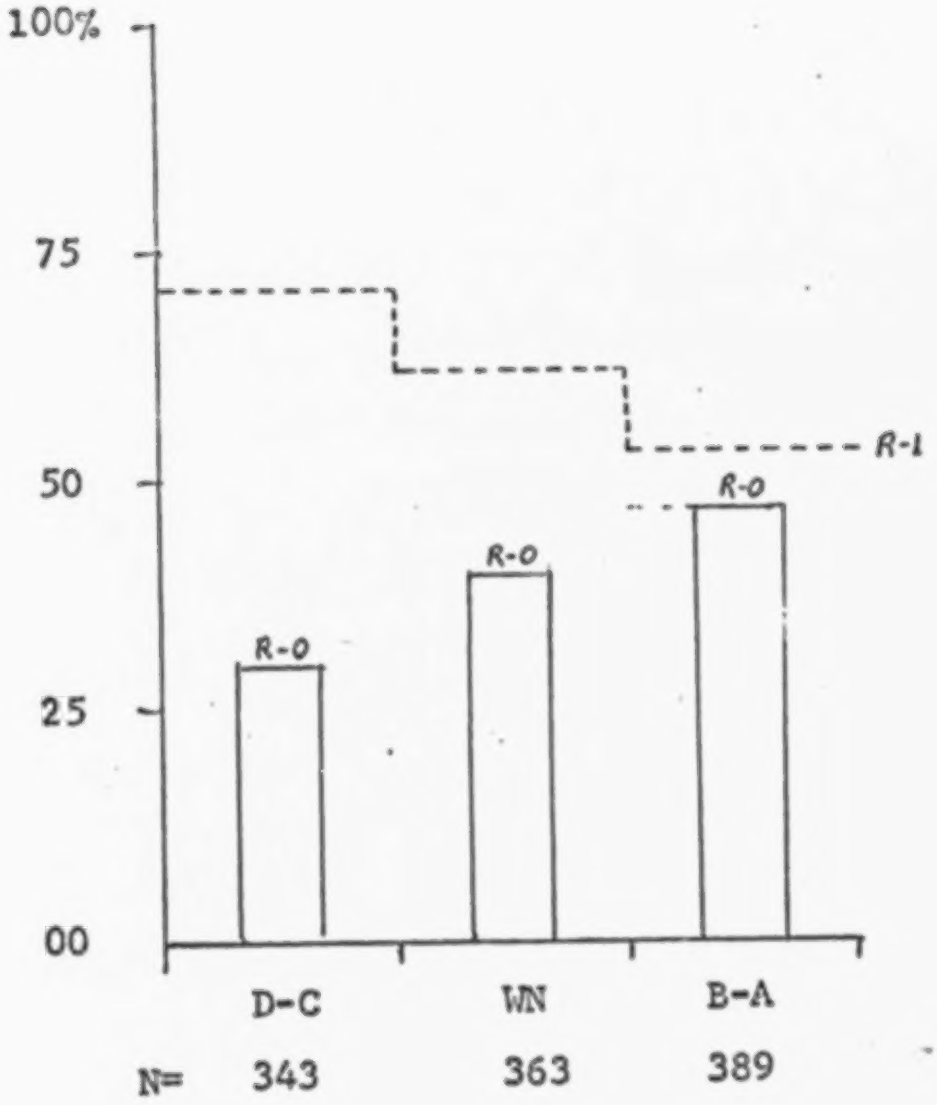


Fig. 22. Stylistic Variation of (RC) in PRE
(Total N=1095)

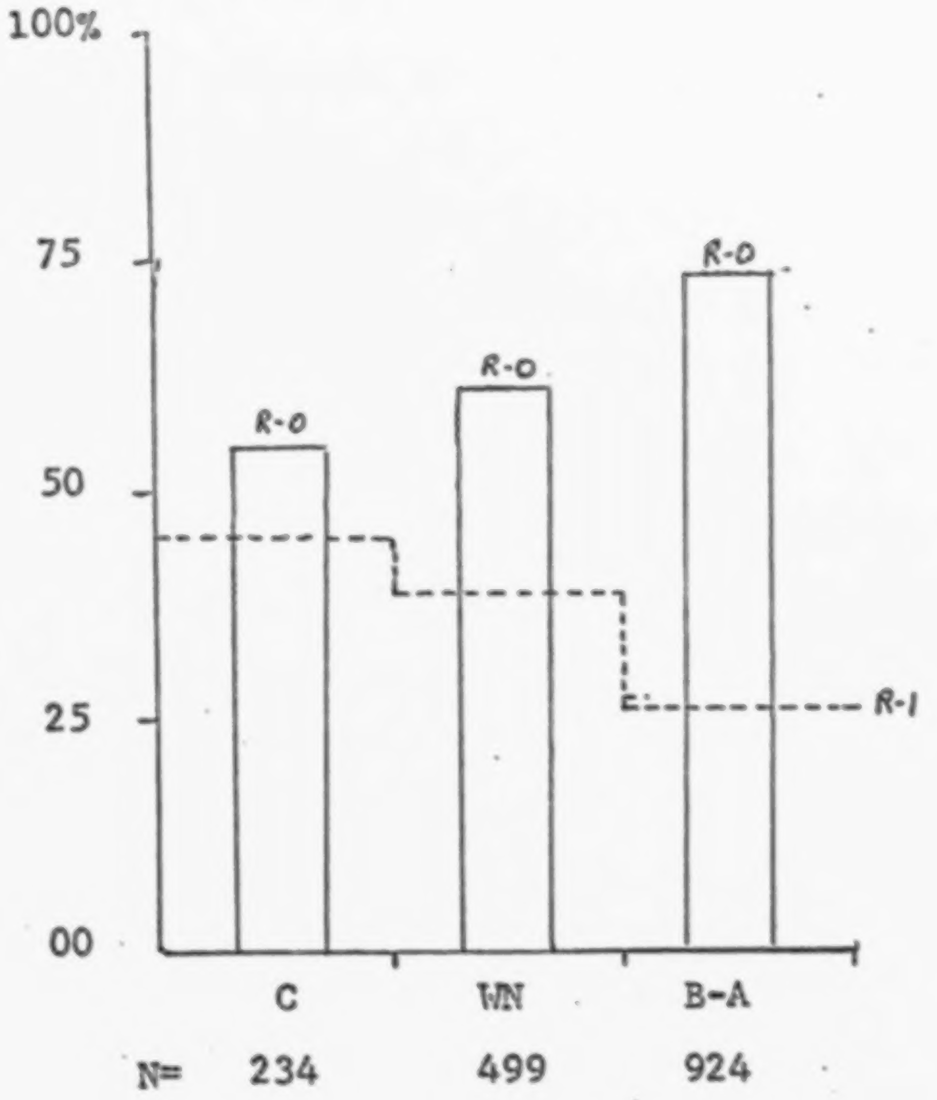


Fig. 23. Stylistic Variation of (R#) in PRE
(Total N=1657)

Here again we note the systematic decrease of R-1 across styles, but it is significant that variant R-0 predominates in this subvariable, showing that the two phonological environments must be taken into account as separate factors.

Perhaps one reason that variant R-0 is the preferred variant in (R#) is that a number of our speakers do not realize that many words such as *water*, *fire*, *sister* actually do end in /r/. They have heard variant R-0 so frequently in the casual speech of the surrounding monolingual community that even reading the written symbol fails to elicit the R-1 variant. As a case in point, a number of informants like to point out what they perceive to be the difference between "sloppy" and careful English by citing the intervocalic /t/ of *water*, pronounced as [wɔtʰə] vs. [wɔɾə]. This is done with no sign of awareness of the existence of a final /r/.

Finally, the extremely even step-like progression patterns in Figures 22 and 23 suggest that the ordered stylistic series D, C, WN, B, A is quite an accurate ranking for showing the distribution of this variable.

PRE Variable (T). This variable is concerned with the phonetic realization of word-final /t/ or /d/ in PRE. Labov *et al*. have studied (T) as part of the complex simplification patterns of all word-final apico-alveolar consonants in lower-class New York speech. They pointed out that it was necessary to distinguish between a (T) which could represent the morphophonemic realization of the past tense marker as in *hit*, *made*, *wrote* from a (T) which was simply part of the word, as in *cat*, *hot*, *it*. We also made this original distinction, but found that the frequency of (T) past tense was too low to be useful as a separate subvariable in our study. Our results are therefore based only on monomorphemic occurrences of (T).

There are three phonetic variants of (T), as follows:

Code	Phonetic variant	Description
T-1	[t, t̚]	alveolo-dental stop /t/ or /d/; may be unreleased; the standard variant
T-2	[ʔ]	substitution of glottal stop for /t/ or /d/
T-0	[∅]	zero variant, or loss of /t/ or /d/

Figure 24 shows the distribution of (T) along the stylistic axis. The standard variant T-1 predominates throughout all styles and seems to have two major levels of contrast, relatively high for C and WN and relatively low for continuous speaking Styles B and A, with a slight drop between the latter two. The glottal variant T-2 has a more systematic increase across the spoken styles, increasing from a low of 10% in WN to a relatively higher frequency of 38% in the most casual A style. The zero variant T-0 is also relatively lower in C and WN and higher in B and A. Thus PRE speakers most usually give some phonetic marker for final /t/ or /d/, either a [t] sound or, less frequently, a glottal stop; i.e., they do not drop (T) except about an average of 12% of the time in any one style.

PRE Consonant Cluster Variable. The most important study of the reduction or simplification of word final consonant clusters in New York City lower-class speech is of course that of Labov et al. (1965b). Their report goes into very detailed descriptions of the

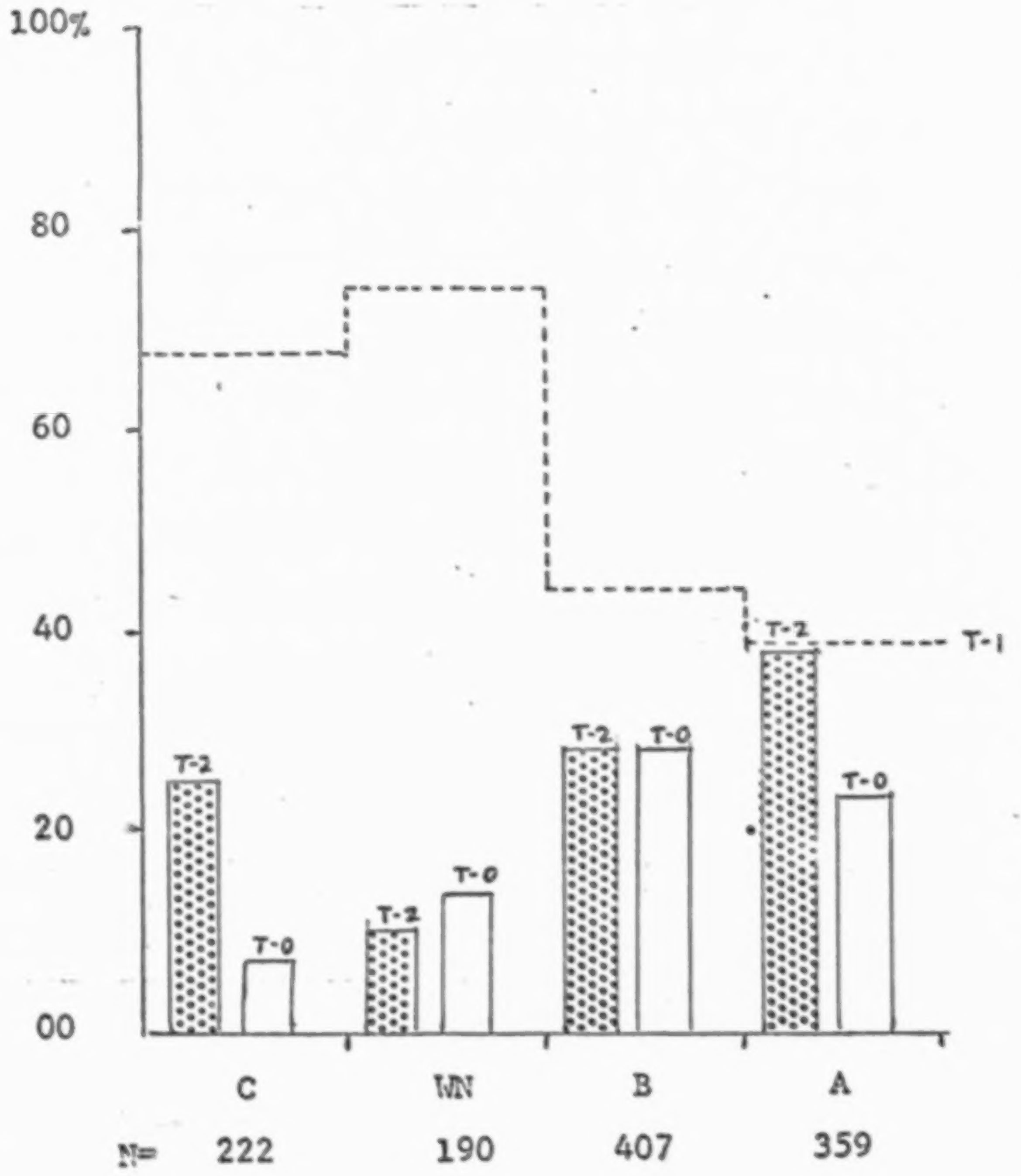


Fig. 24. Stylistic Variation of (T) in PRE
(Total N=1178)

differential distributions of various combinations because of their interest in distinguishing the non-standard phonological from the non-standard grammatical rules which are both potentially reflected by this simplification process. Originally, we too worked with three kinds of clusters or subvariables, sorting each according to the grammatical status of the final /s/ or /t/, as follows:

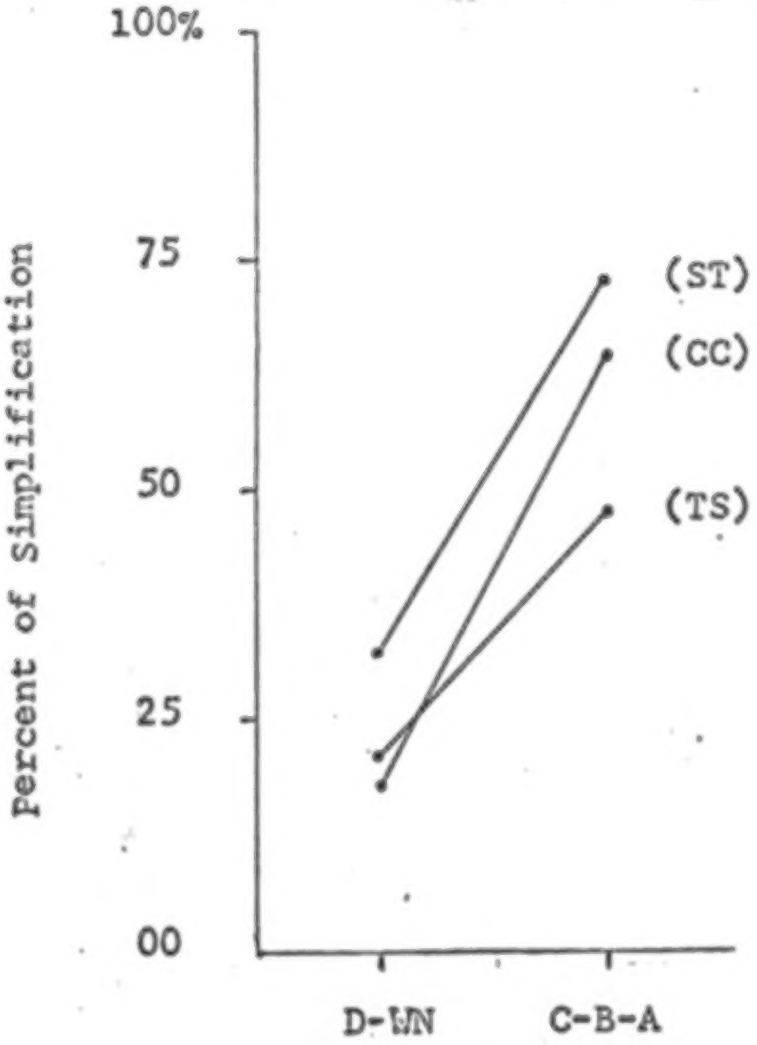
(ST) combinations of /s,z/ plus /t,d/ in words like missed, dozed, mist, just. Final /t/ in missed represents past tense in contrast to mist where the /t/ is merely part of the word. Simplification most usually involves the second element.

(TS) combination of /t,d/ plus /s,z/ in words like cats, feeds, hits, that's. Final /s/ in cats is the plural marker in contrast to the one in hits which is the present tense verbal marker. Simplification usually affects the second element.

(CC) all other consonant cluster combinations, such as in milk, cold, hand, fact.

This detailed breakdown proved both unwieldly and unproductive in our sometimes limited English corpus; there were simply not enough instances of each grammatical vs. phonological subvariety. We have therefore kept these three subvariables undifferentiated as to grammatical vs. phonological status. Our concern has been to demonstrate a simpler thesis than Labov's, namely, that PRE speakers are sensitive to consonant cluster simplification as an indicator of stylistic shift.

Figure 25 shows that percentage of simplification of these three subvariables is a function of the stylistic variation. It appears that the most important style variable for consonant cluster realization is whether they occur in word list vs. continuous text, regardless of the reading vs. speaking media difference. Therefore, D and WN form one point on the scale as opposed to C, B, and A on the other. For each of the three subvariables, there is a substantial increase in



(ST) N= 85 267
(CC) N= 248 551
(TS) N= 69 268

Fig. 25. Stylistic Variation of Final Consonant Clusters in PRE for Two Styles: Word List vs. Continuous Text

overall simplification from the more formal list style to the less formal text style. This means that for subvariable (ST), words like *past* or *first* will be simplified as [pas] and [fərs]. For (TS), words like *that's* or *hits* will be reduced to [ðæs] or [hIs]. For (CC), words like *milk*, *child* or *fact* may be realized as [mɪ^{ə}k], [čaIl], and [fæk].

PRE Variable (VN). Our last PRE variable deals with nasalization, in an attempt to get a cross-language comparison with the (VN) variable already discussed for PRS. As with the Spanish variable, instances of (VN) are always a primary or secondary stressed syllable or word closed by a nasal, as in the words *enter*, *bandage*, *phone*, *him*. Figure 26 shows the percentage of relative frequency of nasalization in PRE. There is no difference between C and WN; however, from WN through A there is a steady rise in relative occurrence, the sharpest rise being between the word list Style C and conversational styles. These results for PRE variable (VN) can be compared to those for PRS variable (VN); refer back to Figure 12. There, we saw that C-WN formed one level of stylistic contrast and that B-A formed another, just as with PRE above. In fact, if we average these two levels and compare (VN) in both PRS and PRE, we get the resulting picture of Figure 27. It is quite remarkable that the levels of relative frequency in both languages are so similar, particularly in the conversational styles. This close correspondence is quite reliable in view of the fact that the N's in each case were exceedingly high (N=2138) for PRE and (N=2078) for PRS. We can conclude that nasalization as a phonetic process is not particularized by language for our bilingual Puerto Rican speakers, but is present in both their languages to a very similar extent and in very similar stylistic levels of contrasts.

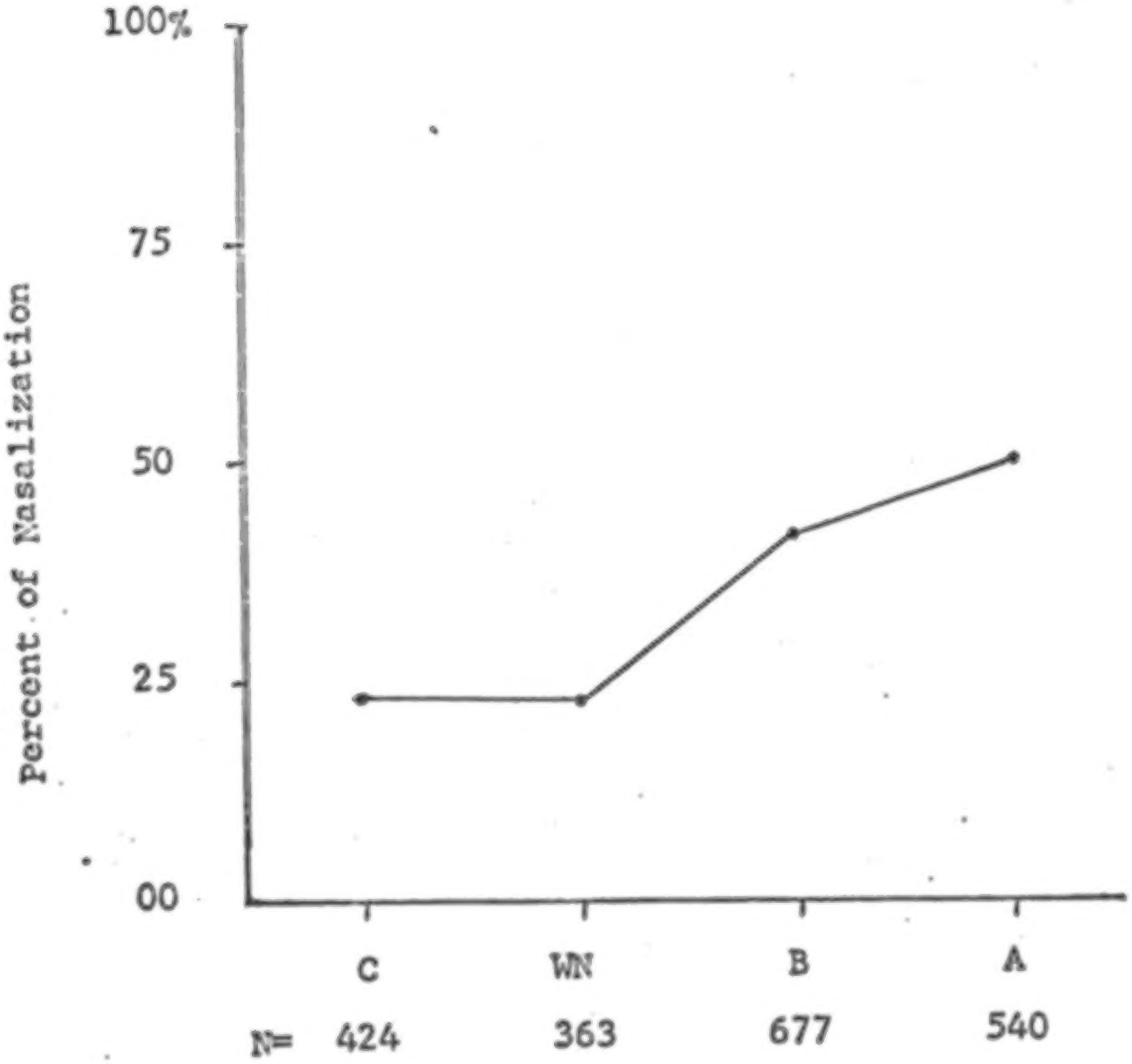


Fig. 26. Stylistic Variation of (VN) in PRE
(Total N=2044)

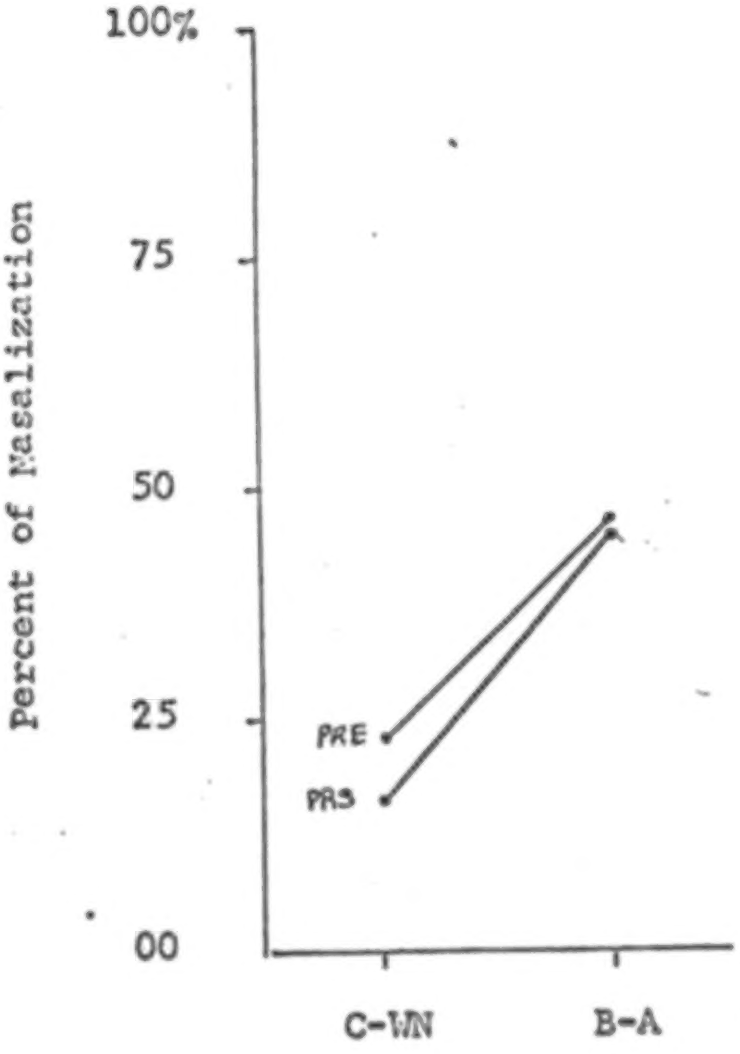
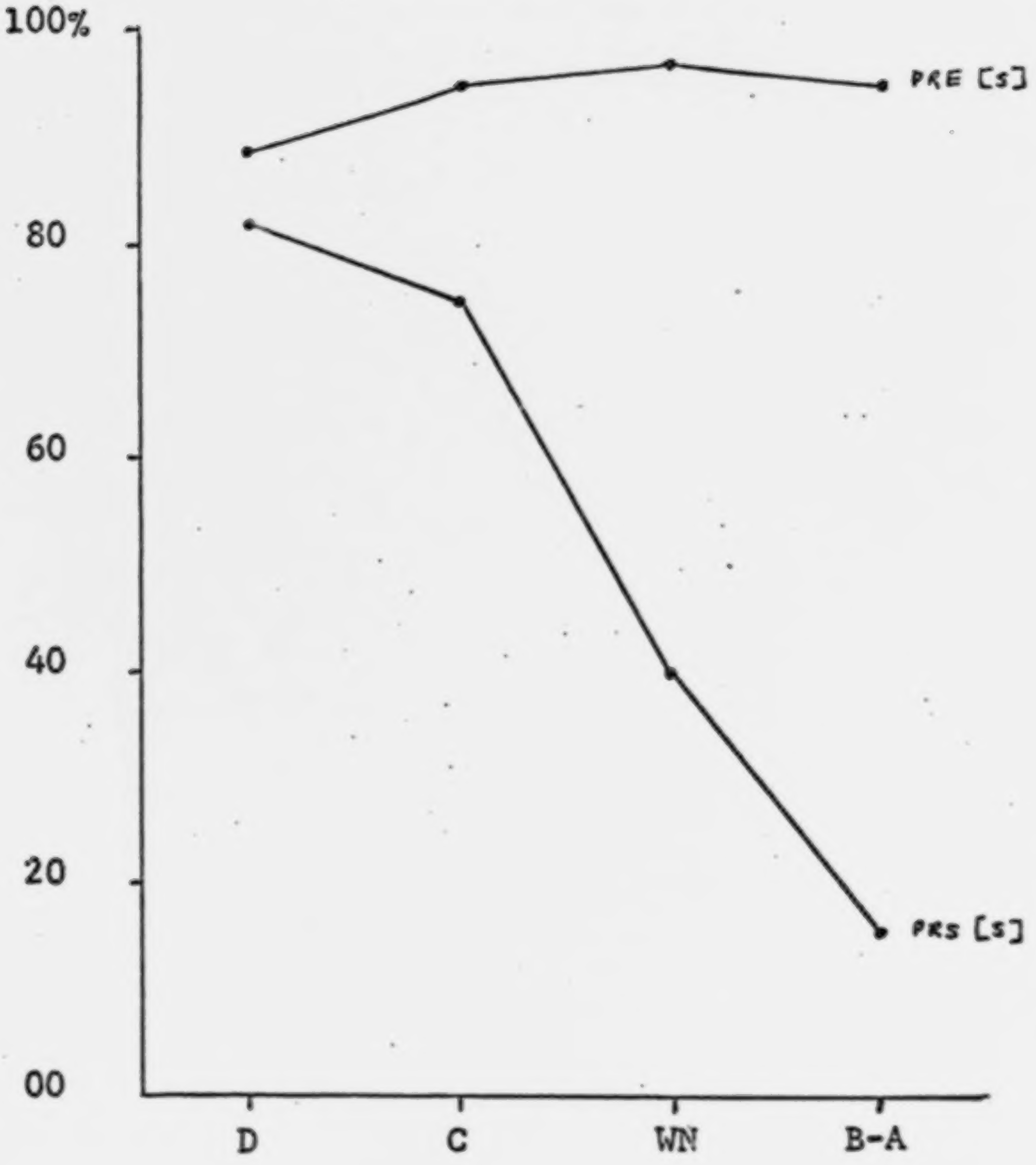


Fig. 27. Comparison of (VN) in PRE and PRS

Compartmentalization. Our analysis of both PR Spanish and PR English phonology has specifically dealt with only those sounds which have been shown to have patterned stylistic variability in each language. As classes of sounds, PRS and PRE variables have not overlapped. In PRS, all were consonantal variables and in PRE, almost all were vocalic variables. However, we did want to make an inter-language comparison of one phonetic sound type to see whether patterns of variation in the speech habits used in one language would carry over ("interfere") with the speech habits of the other. Contrastive analysis studies have naturally assumed this interference to be present in any second-language learning.

Our analysis of the s sound in both languages appears to invalidate this assumption. It will be recalled that word-final s in PRS was extremely but predictably variable. Its particular phonetic realization was closely related to a complex of factors such as phonological vs. grammatical environment and the stylistic context of speech. Under the interference assumption, we would be led to expect similar kinds of variation to exist in PRE, where s is likewise a frequent word-final consonant in monomorphemic words and is the grammatical marker for English plurality and the 3rd person copula "be."

Figure 28 shows the distribution of word-final s in both PRS and PRE. We have only plotted phonetic [s] in both languages and have not dealt with the other possible variants. The N figures for PRS were taken from the (S#) subvariable. The graph shows that whereas word-final [s] in PRS is extremely sensitive to stylistic shifting, word-final [s] in PRE is not at all. In PRE, its occurrence remains relatively high regardless of the formality of the speech situation. We can conclude that compartmentalization between PRS and PRE exists to a



PRE N= 100 175 121 246
PRS N= 77 207 82 626

Fig. 28. Compartmentalization of Final [s] in PRE and PRS

high degree in the case of the [s] sound, and, we would assume, probably elsewhere in the phonological systems of both languages. This figure also shows that s is not a variable in PRE, as it is in the speech of neighboring Negro speakers; see Labov *et al.*, 1965b. It appears that in this case, very little influence of the surrounding monolingual community is seen in the realization of s in PRE.

6. Reliability Check

This section deals with an aspect which has hitherto been largely ignored in the past but one which we feel must be accounted for in any quantitative study of phonological variation, be it social or geographical. This is the matter of reliability of transcription. What assurances do we have that, given the same body of phonetic data, another investigator (or the same investigator at a later period) will arrive at the same conclusions? There are essentially no "right" answers when it comes to aural perception, only a consensus which decides that something "is" what we transcribe it to be.

Although both transcribers were well trained in phonetics, joint practice sessions were not as frequent as we would have optimally desired. Therefore, we felt it was essential to have some means of assessing the accuracy of the transcriptions, particularly since the 45 tapes were quite evenly distributed between transcribers. Due to a lack of sufficient time, we carried out a reliability check only between transcribers, on the intuitive grounds that consensus between transcribers was more difficult to attain than intra-transcriber reliability. Stated in another way, it was felt that more variation would exist between transcribers than within the same transcriber.

Each of the transcribers took tapes that had been done by the other and made separate transcriptions for two of the styles, without prior reference to the original records. The re-checked sample was small, roughly equivalent to 5% of the total data. The transcriptions checked were from eight different corpora, two formal styles and two informal styles in each language, drawn from five different tapes. The styles were A and C, the first being the open corpus of casual conversation, the second being the closed corpus of reading style. Selection of a "representative" set of tapes was based on considerations of early transcription (i.e., transcribed at the beginning of the transcription phase) vs. late transcription.[1]

To determine inter-transcriber reliability we prepared eight separate tabulations (one for each reliability corpus), displaying side by side each transcriber's frequency scores for all variable values in exactly the same sets of words. These tabulations yielded two kinds of comparisons, which will be discussed in turn. Table 5 is a partial reproduction of one of the tabulations. Each transcriber's column of frequency scores can be thought of as a set of scores. In one kind of inter-transcriber comparison we determined the extent of comparability between the two sets by computing a correlation coefficient, which expresses the degree of agreement between the sets of scores. The higher the coefficient, the more nearly alike the two sets of scores, in other words, the greater the amount of agreement between the transcribers.

The Pearson product-moment formula was used to compute the coefficient of correlation for each of the eight tabulations. The results are given in Table 6 below.

On the whole, the correlation coefficients obtained are considered to be quite high, indicating substantial agreement between transcribers.[2] They range from .73 to .94, with all but one above .80 and all but two above .87. The median is .895. Most of the differences among the coefficients are not great. None of the three axes of comparison gives substantially different results, although we can note some general tendencies. The correlation between the A styles are on the average higher

Table 5

Reliability Check: Tape D210, Spanish Style A

Variable	Value/Code	Scores by EH	Scores by RM
(SC)	S-1	1	3
	S-2	13	12
	S-0	--	--
(Spl#C)	S-1	2	2
	S-2	1	1
	S-0	3	3
(RC)	R-1	4	1
	R-2	11	14
	R-3	1	1
	R-0	--	--
(N)	N-1	5	6
	N-2	7	6
	N-0	--	--
•	•	•	•
•	•	•	•
•	•	•	•

Table 6

	Style A		Style C	
	Early	Late	Early	Late
English	.94	.88	.73	.88
Spanish	.81	.92	.91	.91

than that of the C styles, which is somewhat surprising, since we would have thought that less reliability would obtain in transcribing fast spontaneous speech than in slow reading style. On the other hand, greater statistical reliability would be expected on a larger corpus, and A is quite a bit larger than C. In comparing early vs. late, the later tapes yield an average coefficient which is .05 higher than the earlier ones. This would accord with our expectations, namely that as the transcription task proceeds over time, "practice" and familiarity with the range of sounds will naturally sharpen our collective perception.

Finally, the coefficients for the Spanish transcriptions are higher than the English ones by an average of .04. We had expected that the English variables would present a phonetically more ambiguous range of sounds to transcribe, since half of them are vowels or resonants; see variables (EH), (UH), (OH), (AY), and (R). By contrast, only consonantal variables were studied in Spanish. This might explain why the lowest coefficient, .73, occurred in English. However, it in no way explains why the highest coefficient, .94, also occurred in English. Whatever the reasons, all of these average differences are so small as to be considered of little practical importance for the differential reliability of transcription.

The second kind of inter-transcriber comparison sheds some light on the nature of some of the differences observed. Referring back to our eight reliability tabulations, we inspected the actual frequency scores obtained from each transcriber for individual variables to see which ones generally caused the greatest disagreement. As suspected, some of the vowel variables appeared to account for a substantial portion of the disagreement in English. For example, for variable (AY), transcriber EH more often marked value AY-3 or [ai] where transcriber RM tended to give value AY-2 or [aI]. In the (EH) variable, transcriber EH assigned value EH-1 for many of the same words where transcriber RM heard value EH-2. Regarding the (R) variable in English, transcriber EH heard more constriction, i.e., value R-1, than did transcriber RM. Both transcribers are r-pronouncers, so this was not a factor. Perhaps the bias might be accounted for by the lack of a value to denote weak constriction accompanying mid-central vowels, that is, [ɚ] or [ɝ], since both transcribers agreed that words with this shape (e.g., work, her, mother) were the least distinctive phonetically and the hardest to distinguish.

In comparing the separate scores of each transcriber for Spanish variables, it was noted that, for Spanish (RC), transcriber EH had a slight tendency to assign more of value R-1 or flap [ɾ] where RM assigned value R-2 or [l] in those cases where it was ambiguous. Indeed, an intermediate sound, written phonetically as [ɹ́] does seem to occur in some Puerto Rican dialects, as Navarro-Tomás has noted (p. 76). However, preliminary analysis did not reveal this to occur frequently enough among our population to be quantified as an separate value. For the (S#) variable in Spanish, the two transcribers agreed almost completely on instances of the standard value S-1 or [s], but in cases of disagreement over which non-standard value to assign, EH seemed more likely to mark S-0 or [0] where RM marked S-2 or [h]. For the variable (VN) in both Spanish and English, transcriber EH heard the nasalized variant N-0 more often than RM. Since this tendency was equally present regardless of language, it might be indicative of a slight bias by transcriber. However, the tendency was only of the order of 5%.

The substantive differences between transcribers on particular variables as described above were not quantitatively large. The sample covered by our reliability check was perhaps not large enough to reveal many systematic biases between transcribers, should they exist. However, since our first method of comparison made use of a recognized statistical approach to overall reliability and since its results indicated a high amount of inter-transcriber consistency, we conclude that the bulk of the data was reliably transcribed.

Footnotes to Section 6

[1] We did make a preliminary check on poor vs. good tape qualities, reasoning that a tape of poor sound quality would increase the chances of disagreement. However, this expectation was not confirmed for the two texts sampled. In general, poor quality tapes comprised only a very small percentage of our total and were atypical, thus not warranting further inclusion in our reliability check.

[2] A coefficient of 1.00 would indicate perfect agreement between transcribers. Our coefficients compare very favorably with the level of correlation considered desirable in psychological and educational testing, where such methods have usually had the greatest application.

7. Co-Occurrence Patterns Defined as Styles: A Factor Analysis of PRS and PRE Phonological Variables

In Sections 4 and 5, we demonstrated that phonological variation in the Spanish and English speech of PR speakers in a Jersey City neighborhood was not random or "free" but quite structured and patterned when analyzed against the dimension of stylistic variation. Many individual variables in each language were shown to exist and each one was discussed separately in some detail. Sociolinguists such as Fischer, Gumperz and Labov, however, have pointed out that linguistic variants do not occur in isolation but that co-occurrence or co-variation relationships exist among them, such that shifts in the value of one variable entail or imply shifts in some other variable(s). For example, the pronunciation of "you're" as [yər] or [y] would require the pronunciation of "going to" as [gon]; compare the expression "ya' gonna be late" with "you're going to be late." Similarly, in PR Spanish, if a speaker drops the s in "más" he will also drop the second syllable in "nada,"; compare the expression "na' má'" with "nada más." In dealing with bilingual speakers, it is even possible to extend the notion of co-variation across both languages, and, indeed, we suggest that such inter-language co-variation may reflect the functional distribution of the two languages.

The method we have used for studying the co-variation of linguistic variants is based on a type of correlational analysis. In essence, correlation coefficients permit one to express the degree of co-variation between the options of one variable and the options of another variable. The inter-correlations between all our variables in PRS and

PRE should show the proportion of common variation or co-variation shared by them. Correlational analysis is one way of discovering regularities which exist between speakers' varying pronunciations of, for example, the (S) variable in Spanish with their varying pronunciations of the (R#) variable in English. Given a quantitatively large enough sample of linguistic data, these co-variation relationships can be statistically reliable and substantively meaningful. Since we have studied many phonologicable variables and variants, we have also used the technique of factor analysis, which enables us to reduce an initially large number of correlation coefficients to an output of smaller subsets or clusters. This technique works in such a way that only a few members of a cluster need be known in order to "predict" the other members of that cluster.

We are interested in obtaining such inter-correlations or clusters of variants because they give us another perspective for analyzing our data so as to clarify further the notion of "style." For example, we hypothesize that speech styles are characterized by configurations or clusters of sounds which are said to "belong" together or to co-occur. Furthermore, in Section 8 to follow, we claim that speakers within linguistic subgroups (which are defined as speakers who behave linguistically alike) share co-occurrence patterns to a higher degree than do speakers across linguistic subgroups. These subgroups, in turn, will have correlates with demographic (i.e., age, education, birthplace) variables and with linguistic global ratings (Accentedness, Spanish repertoire range, etc.). Ultimately, we will hope to demonstrate that demographically differentiated subgroups have differentiated speech styles in English and Spanish.

The particular statistical technique for deriving clusters of co-varying linguistic variants is one borrowed from the field of psychological testing and sociological compositing, namely, factor analysis. Those scores or items which form clusters are said to share a common characteristic or "factor," and factors can be interpreted or identified, for example, as "verbal comprehension or "mathematical ability," in psychological research or as "Spanish literacy" in Fishman's census of a bilingual neighborhood. The greater the degree to which the scores pertain to the factor (expressed as "factor loadings" or weightings), the more representative these items are of the factor. The major purpose of a factor analysis is to simplify the measurement and description of mass behavioral data by reducing the items or dimensions to be considered from an initially large number of discrete variables to a smaller number of underlying dimensions (factors) and characteristic factor items.[14]

In adapting and applying this technique to the measurement and description of phonological stylistic variation, we have proceeded as follows. Each possible phonetic variant of a variable or subvariable, as it occurs in a style context, was totalled for all speakers and the resulting (absolute) frequency score was considered as a separate "item." For ten styles, five for each language, there were a total of 336 such items. The figure of 336 was arrived at after discarding any item which did not meet the following criteria regarding frequency and distribution among speakers: a) N of informants at least 17, this lower limit being necessary since our data contained samples of open corpora and it was not possible to guarantee in advance that everybody would utter all the sounds studied; b) frequency of occurrence score of at least 35; c) the mean and standard deviation per item showed a reasonable spread in response variation. In using a factor analysis to inter-correlate and reduce these 336 items to a few factors, it was expected that the resulting factors would be amenable to sociolinguistically meaningful interpretation. To give a hypothetical example, we might hypothesize that all the variants coded with the number "1" (which indicates the standard variant) occurring in PRS Styles D and C would fall into a factor as co-occurring variants, in which case we could then label this factor as, say, "Standard Spanish Reading Style." In addition, suppose it were the case that the occurrence of S-1 pronunciation in word-final position of the (S) variable showed the highest correlation (or the highest "factor loading") on a particular factor. This would mean that it was the most characteristic or representative item of that factor and it would be sufficient to use only this item for predicting the standard realizations of all the PRS variables co-occurring in this factor, thereby giving us considerable parsimony and precision in measuring "Standard Spanish Reading Style."

The computation of the 336 inter-correlations to arrive at co-occurrence clusters or factors was performed in two successive stages.[2] A preliminary factor analysis of these items yielded 59 factors, from which a total of 179 items with high factor loadings were extracted as input for a final 179x179 correlation matrix. A factor analysis of this matrix in turn yielded ten final factors, six of which have very interesting and meaningful sociolinguistic interpretations which shed further light on the stylistic structure of phonological variation in PRS and PRE.[3] These six factors are each described by means of a table showing the item number (for identification purposes only), the style context in which it occurred, the item itself (i.e., phonetic variant), and the factor loading,[4] followed by an interpretation of the factor.

Factor 1 may be called "English Dominance." More than half of the 32 items appearing in this factor were English and included items from all five style contexts, whereas all but two of the Spanish items were from only one style, B. From this factor, it is obvious that English plays a predominant role in the usage patterns of speakers who use these particular variants.

F 1. English Dominance

Item #	Style Context	Variant	Loadings
28	PRS-B	RC-1	-.49
34	"	Vdo-1	-.54
36	"	N-2	-.66
39	"	VN-1	-.65
45	"	S#-2	-.76
48	"	SC-2	-.76
69	PRE-D	UH-3	-.77
75	PRE-C	UH-2	.76
76	"	UH-3	-.75
78	"	EH-2	.82
79	"	EH-3	-.71
102	PRE-WN	EH-3	-.67
126	PRE-B	EH-2	.60
135	"	RC-0	.74
137	"	R#-0	.62
145	"	T-2	.75

The first six items listed are Spanish and occur only in Style B. They are all negatively loaded, in contrast to the English items, most of which are positively loaded. What this means is that speakers who use these variants in their conversational style of Spanish do not use these particular English variants when they use English. Conversely, speakers who do use the English variants do so in a wider range of styles, whereas their Spanish usage is more restricted, consisting of just those values in B. They speak a colloquial style of English which is best characterized by their use of UH-2 or [ʌ], EH-2 or [æ], R-0 or [∅] and T-2 or [ʔ]. In other words, their vowels are the standard ones, but they tend to drop both syllable and word-final r̲ and tend to use glottal stops for final t̲, linguistic traits which are all highly characteristic of many native New York City speakers of English. It is thus entirely natural that Items 69, 76, 79 and 102, the (UH) and (EH) interference variants, are all negatively loaded on this factor indicating that speakers for whom English is dominant use very little of these interference sounds in their overall usage of English. This dominance of English can be best represented by Items 75 and 78, UH-2 and EH-2, respectively, since they are both among the most highly loaded items in the factor as well as occurring several times in the factor. Thus for PR speakers who use [ʌ] or [æ] in English, it is highly probable that they speak an overall colloquial style of English which functions in a wide variety of social situations and in general have a more restricted usage of conversational Spanish. If they use Spanish (and the factors do not provide information as to whether they do or don't, but only what kind they don't use), it will specifically not be the style represented in Items 28, 34, 35, 39, 45 and 48. We can turn the picture around and say that speakers who do use these Spanish six items have a fairly "correct" PR pronunciation, though not a standard one. That is, they pronounce syllable-final r̲ and intervocalic d̲, don't nasalize their vowels, have the common velar n̲, and aspirate their s̲ in both syllable and word-final positions. In their English, they most certainly do not have the standard vowel pronunciation, but are more likely to have the interference variants UH-3 and EH-3.

Factor 2 is also primarily an English factor and can be called "Accented Conversational English". Only three out of 14 items were Spanish and had negligible loadings, whereas the rest were from English Styles B and A. The most characteristic items on this factor were:

F 2. Accented Conversational English

Item #	Style Context	Variant	Loading
124	PRE-B	UH-3	.72
138	"	R#-1	.62
151	PRE-A	UH-3	.74
153	"	EH-3	.86
171	"	T-1	.65

The co-occurring variables in F2 are almost identical to the group which co-occur in F1; the difference being in their phonetic realizations and in the fact that the F2 items come from only the conversational style contexts B and A. In F2, the variants show that interference patterns predominate and that speakers are likely to use UH-3 [ɔ] and EH-3 [a] in such words as lunch and language in their conversational English. They also pronounce final r and final t with their full standard values. It is interesting to note that Item 138 or word-final r correlates highly with this factor. As we suggested earlier in our separate discussion of PRE (R) variable, R-1 pronunciation could possibly be interpreted as an interference equivalent for Spanish-dominated speakers, so that it is thus quite natural to find it correlating here so highly with the vowel interference variants.

Factor analysis inter-correlates common variation over the total corpus of our speakers. This means that the data in F1 and F2 could presumably be uttered by some of the same people. From this, we can tentatively conclude that there are two conversational styles in PRE. In one style (F1), the variables (EH), (UH), (R) and (T) are realized as the set of sounds [ʌ æ 0 ʔ], respectively, and in the other style (F2), as the set [ɔ a r t], respectively. A sentence such as "he bought another fancy car" can have these two ranging pronunciations: [hi bɔʔ ənʌðə fænsi ka] or [hi bɔt anɔðər fansi kaʳ]. The most characteristic predictors of this second style are the variables (EH) and (UH), Items 151 and 153, respectively, which are the very same variables which are the best predictors of the first style; see F1.

Factor 3 can be interpreted as yet another English conversational style, which we are calling "Substandard English." Out of 18 items, only three were Spanish and had relatively low factor loadings. The most characteristic English items are as follows:

F 3. Substandard English

Item #	Style Context	Variant	Loading
81	PRE-C	AY-1	.38[5]
91	"	CC-reduced	.71
127	PRE-B	OH-1	.65
152	PRE-A	EH-1	.87
154	"	OH-1	.77
165	"	R#-0	.80
166	"	VN-0	.80
179	"	CC-reduced	.59

By looking at all the variants in this factor, we can see that they are quite representative of the substandard lower-class Negro speech of New York City being investigated by Labov *et al*. (1965b). In vowels, speakers who use a very short lower front vowel for (AY), Item 81, will also use higher closed vowels for (EH) and (OH), Items 127, 152, and 154, respectively. The vowel qualities in a sentence such as "I had a black dog" will be realized most likely as [a hɛd ə blɛᵊk doᵊg]. In consonants, these speakers will also drop word-final r, reduce their final consonant clusters, as well as nasalize their vowels. This speech style of English is one of the most accessible to our PR population since they live in the same neighborhoods as do Negro speakers and have social and hence linguistic contacts with them. The results of these interaction and acculturation processes are becoming apparent in the speech habits of some of our PRE speakers, as demonstrated by F3. The best predictor for this English speech style is Item 152, an [ɛ] or [ɛᵊ] pronunciation of the variable (EH).

Factor 4 might best be called "Spanish and English Apocope" and presents strong evidence for demonstrating that the same socio-linguistic process can underlie the speech production of both languages among bilingual speakers. In the first place, the 24 items were almost evenly divided between Spanish and English, covering three styles of each. Secondly, the seven most characteristic items from each language involve realizations in which phonetic distinctions are reduced by dropping them entirely, most generally at syllable and word-final positions, a linguistic process known as apocope or apocopation. The most characteristic items are as follows:

F 4. Spanish and English Apocope

Item #	Style Context	Variant	Loading
23	PRS-WN	S#-0	.73
26	PRS-B	S#-0	.74
38	"	VN-0	.50
46	PRS-A	SC-0	.72
53	"	RC-3	.61
54	"	R#-0	.45
61	"	VN-0	.47
67	"	S#-0	.73
98	PRE-C	CC-not reduced	-.35
107	PRE-WN	AY-2	.51
109	"	AY-3	-.59
113	"	Ng-1	.66
119	"	TS-reduced	.72
162	PRE-A	RC-0	.75
169	"	T-0	.78

Looking at the Spanish items first, it is immediately noticeable that all variants here have a zero code for the (S) and (R) variables. This means that these sounds are phonetically realized as [Ø]. In Item 53, the subvariable (RC) is coded as R-3, the assimilation variant, which means that r takes on the same phonetic quality as the consonant following it. In both zero and assimilation variants, the phonetic process is the same, namely one in which the phonetic distinctiveness of the variable is lost or in some way attenuated. There is also evidence in PRS of an assimilating (S) variant, although this was not included as an independent variant in our study of variable (S) due to its relatively low frequency of occurrence in our speech samples (where it was counted as S-0). In Variable (VN), Items 38 and 61, we have another type of phonetic weakening, the loss of syllable-final nasal consonants accompanied by nasalization of the preceding vowel.

The convergence of all these Spanish variants into one co-occurrence cluster enables us to define rather precisely a prevalent colloquial speech style of PRS which Puerto Ricans themselves have characterized as "eating the (ends of) words." It is the most casual conversational style (note that most of the items are from PRE-A) and it is certain to be the one most frequently used in the everyday social interaction of Puerto Ricans with each other.

We now turn to a discussion of the English variants in this factor.[6] The vowel values in Items 107 and 109 are complements of each other, since they carry opposite values. The negative Item 109 is the long upglide in [ai] and its negative value means that it is characteristically not used for speakers who use all the positively loaded items in the factor. Instead, they use Item 107, which represents the short upglide [aI]. For consonant clusters, the same process of shortening or reduction applies. Item 98 is negatively loaded (although low) with respect to Item 119, meaning that speakers who reduce (TS) are not as likely to have co-occurring non-reduced (CC), but presumably reduce these as well. Other single final consonants are also dropped, final t and syllable-final r, Items 169 and 162, respectively. Finally, Item 113 is the pronunciation of final unstressed -ing in words like "something, anything" as "somethin'" and "anythin'", pronunciations which, in some psychological if not linguistic sense, constitute a shortening of these words.

The two co-occurring styles of Spanish and English are comparable in that both contain speech variants which either reduce or delete underlying phonological distinctions. The total results of this process of apocopation are speech styles which are abbreviated, almost code-like styles well suited for conversational discourse.

Factor 5 is called "Standard Conversational Spanish." Of the 19 items which showed up in this factor, more than half were from all

5 style contexts of Spanish and carried the highest loadings in the factor. The remaining English items were both too heterogeneous and carried lower loadings to contribute to an overall characterization of English, and have therefore not been used in interpreting F5.

F 5. Standard Conversational Spanish

Item #	Style Context	Variant	Loading
11	PRS-D	R#-1	.51
12	PRS-C	RR-3	-.44
20	PRS-WN	RR-1	.47
43	PRS-B	S#-2	-.61
47	PRS-A	SC-1	.77
50	"	S#-1	.55
52	"	RC-1	.70
55	"	R#-1	.56
63	"	RR-3	-.31

It is immediately evident that all the variants coded with the number 1 are positively loaded, in contrast to variants with other numerical codes which are negatively loaded. This indicates that a high usage of one group of sounds automatically excludes any high usage of the other group of sounds. Since code 1 is the code for all the standard variants of our Spanish variables, and since it occurs throughout all of the style contexts, we conclude that its speakers are the most conscious in adhering to correct or standard pronunciation norms in their overall speech patterns.

Variable (R) is most consistently pronounced with the flap [ɾ] in both syllable and word-final position. For the (S) variable, S-2 or [h] pronunciation in Item 43 is negatively related to S-1, indicating its relative absence in the speech of s-pronouncers. Item 47, or SC-1, appears to be most characteristic of F5. Finally, Items 12 and 63, or RR-3, the velar variant, are negatively loaded in relation to RR-1, Item 20.

The relatively low loadings in all three items indicates that they are not as typical of this "Standard Spanish" factor in the same sense as are the R-1 and S-1 variants. Thus we might conclude that velarization of (RR) is never completely absent from, nor wholly present in, a given speech type, regardless of context, although individual speakers may fail to produce it altogether. We can assume that some speakers who may have a standard pronunciation for most of the Spanish sounds as well as speakers who don't can be alike in that velar (RR) cannot be reliably predicted in their total speech styles. F5 confirms the observation of many investigators of PRS that the velar [χ] of (RR) is most peculiar and characteristic to the PRS dialect and randomly affects its speakers regardless of social status, education, or geographic origin.

Factor 7 appears to deal with a formal speaking style in both Spanish and English and hence is called "Formal Spanish and English." Half of the 14 items in the factor came from the style context WN in both languages, where they were among the most highly loaded in the factor. The most characteristic items on this factor are:

F 7. Formal Spanish and English

Item #	Style Context	Variant	Loading
17	PRS-WN	RC-1	.60
18	"	Vdo-1	.54
100	PRE-WN	UH-2	.52
104	"	OH-2	.65
112	"	VN-1	.85
120	"	TS-not reduced	.52

In Spanish, the standard pronunciation of preconsonantal *r* co-occurs with the standard pronunciation of intervocalic *d*. These two, in turn, co-occur with standard English vowels (Items 100 and 104), non-nasalized vowels, and no reduction of certain consonant clusters. Taken as a whole, F7 represents a careful pronunciation norm.

F7 can best be interpreted in the following way. In a very formal speaking style such as the recitation of a list of isolated words, speakers have an opportunity to concentrate on their speech output via the feedback mechanism of self-monitoring. Under these circumstances, standard variants are automatically favored to occur, all other things being equal. F7 shows the co-occurrence of several standard variants in both Spanish and English word-naming tasks, indicating that, regardless of language, bilingual speakers interpret the "same" social situation by like behavior. As with F4, we again see that such similar sociolinguistic behavior is a manifestation of one sociolinguistic process which cuts across two languages. We assert that this is only possible in speakers for whom bilingual interaction is a stable, functionally-distributed intra-group phenomenon.

We can conclude our discussion of the various styles or language varieties in PR bilingualism by a summary of the kinds of information and insights gained from our factor analysis. It has enabled us to define rather precisely "style" as a co-occurrence cluster of variants. The definitions given in the six factors or styles were both statistically valid and linguistically unified. It has also given us a method for future measurement of bilingual dominance or usage of one language relative to another, as well as for defining the range of stylistic variation in each. Finally, it has shown that a cross-language examination of co-variation can reveal underlying sociolinguistic processes common to both languages. While there remain many "bugs" in the system, we feel this application of factor analysis to a stylistic study of phonological variation in PR bilingualism has been very revealing and is a most promising technique meriting further use and refinement specifically for the purposes of sociolinguistic analysis.

Footnotes, Section 7

[1] For a clear presentation of the techniques and applications of factor analysis, see A. Anastasi (1961), pp. 145-152 and 338-343.

[2] The actual computational technique used in the factor analysis of our data, known as verimax orthogonal rotation, were performed on data-processing equipment; see Appendix 12.3, "Linguistic Layout," for the input data format, and Appendix 12.4 for the machine codings.

[3] Unfortunately, not all 10 factors were amenable to sociolinguistic interpretation, for a number of reasons, such as: a) their factor loadings were too low for most items to merit interpretation; b) co-occurring items made little linguistic or sociolinguistic "sense" as a unity; c) some items (usually those with lower frequency scores) obtained unreasonably high loadings in comparison with others; d) some items with lower N of respondents may also have obtained skewed loadings. Finally, a factor analysis of scores is only as reliable as the scores themselves. Since all score tokens were individual phonetic judgments of the speech stream, the extent to which all these sounds are "agreed" upon by various transcribers will affect the scores themselves. In our own use reliability was sufficiently high to expect that reasons (b), (c) and (d) above would not obtain again if a larger corpus of data on a larger sample of speakers were obtained.

[4] Factor loadings can carry negative as well as positive values. The difference in meaning can be provided by a brief illustration. Given a Factor X and Items q, p, r, and s as phonetic sounds:

Item	Load
q	.90
p	-.85
r	-.60
s	.20

we can interpret the factor as follows:

a) sounds q and p best describe what the factor measures, since their loadings are numerically highest.

b) speakers who pronounce a lot of q pronounce very little p.

c) conversely, speakers who use a lot of p use very litte q.

d) speakers who use q don't use much s, but they use more s than they do either p or r, and vice versa.

e) speakers who use a lot of p also use quite a bit of r.

f) item q is the most characteristic of the factor, item s, the least.

In our factor tables, only the most characteristic items are listed and used to describe the factor. These items, for the most part, have loadings (positive and negative) above .50. A perfect correlation coefficient is 1.00 or -1.00 and an item having this loading is said to be entirely related to the factor and to it alone.

[5] This item AY-1 is included here on factor 3 despite its low loading because, as a separate item, it correlated highly (>.60) with the other items in this factor. The very fact that it showed up in the factor at all, low loading notwithstanding, is evidence that it correctly "belongs" to this factor F3. It did not have as high a loading on any other factor.

[6] We must acknowledge beforehand, however, that while the English data is interesting and certainly relatable to the evident apocope in the

co-occurring Spanish style, we are less certain of its statistical validity, since some of these items had much smaller frequency scores than did the Spanish items.

8. Demographic and Global Linguistic Characteristics of Phonologically Contrasting Population Groups.

Thus far we have considered linguistic variables one at a time with respect to their proportional realizations in different stylistic contexts. At this point we turn to examine an entirely different set of questions, namely, (a) given all of the variables that were retained for factor analytic purposes how many behaviorally different population groups are subsumed among our respondents; (b) what demographic characteristics differentiate between and help define these population groups that behave differently across all linguistic variables; (c) what global sociolinguistic characteristics (such as repertoire range) differentiate between these population groups; and, finally, (d) what are some of the most striking linguistic factors and variables on which these groups differ. It is hoped that answers to questions such as these will add a dimension of reality to our discussion thus far as well as enrich our understanding of some of the factors and variables previously considered.

a. Behaviorally Different Population Groups

The statistical method known as Q group analysis was utilized in order to establish population groups that showed maximal between group differences and, simultaneously, maximal within group similarities with respect to all of those linguistic variables utilized in the factor analysis reported in Section 7, above. Actually, Q group analysis is also a type of factor analysis. However, whereas ordinary factor analysis (also known as R analysis) is based upon the intercorrelation of behaviors (in our case, the use or non-use of linguistic values), Q group analysis is based upon the intercorrelation of individuals. Thus, whereas ordinary factor analysis discloses what clusters of behaviors tend to be maximally independent of other clusters of behaviors at the same time that each cluster itself is composed of maximally interdependent behaviors, Q group analysis discloses what clusters of individuals tend to behave maximally unlike other clusters of individuals at the same time that each cluster itself is composed of maximally similar individuals. The factors yielded by Q analysis are known as Q groups. Other references to the use of Q analysis in sociolinguistic work may be found in chapters II-3-b, II-4-a, III-1 and III-2-a of this report.

b. Demographic and Global Sociolinguistic Characteristics of Maximally Different Population Groups

Q group analysis yielded four clusters of individuals. For each of these, cross-tabulations were obtained with 6 demographic variables (age, sex, birthplace, educational level, occupation, and years in the continental United States) and 4 global* sociolinguistic variables

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*Note: Global evaluations were made of the performance of each respondent in regard to command of English phonology (Scale of Spanishness) and demonstrated range of styles in both languages. The Spanishness scale evaluation was made by inspecting the English transcripts for high incidence of interference vowels or the signs of Spanish phonology. such as flapped ɾ. Evaluation of repertoire range was made by an impressionistic comparison in both languages of spoken versus reading styles. Those using heavy proportions of substandard items in reading were considered one-style speakers, unless spoken style showed even greater informality, such as widespread apocope. Those who used secondary or zero values in conversation but standard values in reading were considered two- or three-style speakers according to the proportional variation between styles or the presence of an intermediate spoken style for interview questions. Reading ability was rated from performance on word reading and paragraph reading tasks.

(Spanish accented speech, reading ability, Spanish repertoire range and English repertoire range). The demographic data utilized was obtained from a language census in which our respondents also participated. The global sociolinguistic data was derived from ratings by the current authors after the scoring and recording of individual linguistic variables had been completed for all of our subjects. Table 1 indicates the percent distribution within each Q group across each of the demographic and sociolinguistic parameters mentioned above.

Q_1 was found to be composed of seven people, mostly young adult females, all of whom were educated in Puerto Rico, with only two having received fewer than seven years of schooling. All but one person in this group originate in the coastal area of Puerto Rico or San Juan; the exception left her upland town as an adolescent recently enough to have repeated some of her schooling in a New Jersey junior high school. Virtually the entire group reads both Spanish and English fluently, and the group can be characterized as bilingual, with moderate to heavy phonological interference from Spanish in their English, and a flexibility of styles in Spanish.

The twelve people falling into Q_2 were evenly divided between males and females, showing greater than proportional representation for males in this "most-English-fluent" group. A substantial proportion of the group was born in the United States (41%), while another one-third are natives of coastal Puerto Rico. All but two of these respondents have received some U.S. schooling, four being ongoing students. This is in keeping with the fact that Q_2 is the youngest of the groups; fully 75% of its members are under 18 years of age. Half of them read both Spanish and English fluently, with the others

Table 1

COMPOSITION OF Q GROUPS BY DEMOGRAPHIC AND GLOBAL LINGUISTIC CHARACTERISTICS

	Q1(n=7)	Q2(n=12)	Q3(n=9)	Q4(n=17)
Sex				
1. M	28.57	50.00	44.44	29.41
2. F	71.43	50.00	55.56	70.59
Birthplace				
1. U.S.	00.00	41.67	11.11	00.00
2. San Juan	14.29	8.33	22.22	5.88
3. Coastal & lowland	71.45	33.33	22.22	41.18
4. Highland	*14.29	*16.67	44.44	52.92
Age				
1. 13-18	14.29	75.00	22.22	5.88
2. 19-24	28.57	16.67	11.11	5.88
3. 25-34	28.57	00.00	33.33	41.18
4. 35-44	14.29	8.33	22.22	17.65
5. 45-54	14.29	00.00	11.11	23.53
6. 55-64	00.00	00.00	00.00	5.88
Education				
1. 6th gr. or less PR	28.57	8.33	22.22	47.06
2. 7th-9th gr. PR	28.57	00.00	33.33	35.29
3. 10th-12th gr. PR	28.57	8.33	11.11	17.65
4. 6th gr. or less U.S.	00.00	25.00	11.11	00.00
5. 7th-9th gr. U.S.	+14.29	41.67	11.11	00.00
6. 10th-12th gr. U.S.	00.00	00.00	11.11	00.00
7. College (U.S.)	00.00	16.67	00.00	00.00
U.S. Residence				
1. 5 yrs. or less	14.29	8.33	22.22	17.64
2. 6-10 years	28.57	16.67	33.33	23.53
3. 11-20 years	42.86	41.67	33.33	58.82
4. 20+	14.29	00.00	00.00	00.00
5. U.S. born	00.00	33.33	11.11	00.00
Occupation				
1. Operative, service, laborer, welfare	14.29	16.67	55.56	58.82
2. Craft, foreman, blue collar	14.29	8.33	11.11	11.76
3. Self-empl., white colar, clerk	28.57	00.00	00.00	00.00
4. Professional, mngr., official, college stu.	00.00	16.67	11.11	00.00

*Highland-born young people who came to U.S. at ages 10-14.
+9 years ed. PR with two years repeated in U.S.

Table 1 continued

	Q1	Q2	Q3	Q4
Occupation				
5. Housewife	42.86	8.33	11.11	29.41
6. Unemployed minor (16+ non-stu.)	14.29	16.67	00.00	00.00
7. Students	00.00	33.33	11.11	00.00
Scale of Spanishness				
0. Span. monolingual	14.29	00.00	22.22	23.53
1. Heavy phon-synt. interf. S-E	28.57	00.00	44.44	64.71
2. Moderate phon-synt. interf. S-E	57.14	8.33	11.11	11. 6
3. Slight phon-synt. interf. S-E	00.00	33.33	00.00	00.00
4. Maximal differentiation	00.00	16.67	11.11	00.00
5. Slight two-way interference	00.00	25.00	00.00	00.00
6. Slight interf. E-S	00.00	16.67	11.11	00.00
Reading Ability				
0. Neither	00.00	00.00	22.22	17.65
1. S not E	14.29	00.00	22.22	29.41
2. Both, E w. difficulty	00.00	00.00	11.11	23.53
3. Both fluently	85.71	50.00	22.22	17.65
4. Both, S w. difficulty	00.00	16.67	11.11	5.88
5. E not S	00.00	33.33	00.00	00.00
6. Unknown	00.00	00.00	11.11	5.88
Repertoire Range - English				
0. Virtual Spanish monolingual	14.29	00.00	22.22	41.17
1. One-style, limited fluency	14.29	00.00	22.22	35.29
2. One-style, informal fluent	42.86	41.67	33.33	17.65
3. Two-style shifters	28.57	50.00	22.22	5.88
4. Maximally fluent in English	00.00	8.33	00.00	00.00
Repertoire Range - Spanish				
1. One-style, no shifting	00.00	50.00	44.44	11.76
2. Two styles	57.14	16.67	55.56	47.06
3. Three styles	42.86	33.33	00.00	41.18

showing difficulty or inability in Spanish reading. Only one respondent has as much as moderate interference from Spanish into English, with the rest distributed toward the English end of the Spanishness scale. While 50% command only one style in Spanish, 58% command two or more styles in English.

Q_3, composed of nine people, eludes definition by demographic criteria alone, with its most characteristic feature being a limited range of styles in Spanish. It is the only group which has no three-style speakers in Spanish. This obtains in spite of the fact that the group is primarily Spanish-speaking, with 44% of its members of highland origin. Likewise, 44% show heavy phonological interference from Spanish in their English speech. In education, as in most other respects, the members of Q_3 are distributed over the range of categories; and the group takes definition mainly as a function of its R factor profile.

Q_4, 17 people, is generally the most highland, the oldest, and the least educated group, with a rather high degree of stylistic flexibility in Spanish in spite of its lack of education. Fifty-three percent of Q_4 are highland born; and while in absolute terms this group contains just 57% of all highland-born people, the percentage rises to 69% when those young people under 23 in other groups who left Puerto Rico at an early age are discounted. All but two members of the group are over 25 years of age, with 47% well over 35. No one in this group has any U.S. education, and a plurality, 41%, received fewer than 6 years of schooling in Puerto Rico. Thus it is not surprising that on the Spanishness scale 64% are considered to have heavy phonological interference from Spanish in what English speech they produce.

Virtually the entire group displayed two or more speech styles in Spanish, with 41% showing three, while 50% of all three-style Spanish speakers in the sample belong to this group.

In summary, the four Q's divide into two basic groups according to language ability, the bilinguals versus the Spanish dominant speakers. Within the bilinguals, there are those for whom English is identifiably a second language, essentially people for whom Spanish was the sole language of instruction but who finished or came close to finishing high school in that language, as against those rather younger people for whom English was or is the language of instruction, and in most cases is the language of primary usage. Within the essentially Spanish monolingual group, for whom English is to varying degrees marginal, there are those who command a very narrow range of styles in their native language as opposed to those skilled at switching Spanish styles. This appears to be regardless of education. In fact, the individuals who display a greater Spanish linguistic repertoire, perhaps by virtue of being both older and more rural-highland in origin, have an even lower overall level of education than those whose Spanish is essentially one-style.

Two other demographic variables which appear on Table 1 but which do not enter into the differentiation of the Q groups are U.S. residence and occupation. Two interesting points do come up in regard to these variables. In all groups, more people fall into the 11-20 years residence category than into any other, with the exception of Q_3, in which only one-third falls into that category and another one-third falls into the 6-10 years' residence category. Thus U.S. residence does not function as an independent variable in determining the acquisition of English. The other point is that the two least bilingual groups show a majority of their members to be in the operative category of occupations. This is most interesting in relation to sex. Q_1 and Q_4 have the same proportional representation of females, yet Q_1 is occupationally 43% housewives, while Q_4 is 59% operatives, with only 29% housewives. Obviously, more women in the non-English and low education Q_4 group work than do women in the Spanish-educated bilingual Q_1 group.

c. Linguistic Differences Between Q Groups

For the purpose of contrasting the linguistic performance of the four Q groups, all linguistic items were considered for which (a) data were available for at least 28 individuals and for which (b) the difference between the highest and the lowest ranking groups was at least equal to the standard deviation of the entire sample. A loading of over ±50 was also required, although exceptions were made in the cases of items 84, 54, and 61, with loadings of 40, 45, and 47, respectively. These were included because of their relevance to the factors in question and since they fulfilled the other two criteria utilized. Loadings over 50 comprised almost all of the items that were selected on the basis of significant differentiation and N.

Out of ten factors, five contained sufficient items that met the above criteria. While some items considered before this test to be representative of their factors did not qualify for inclusion, the final configuration of items on the five factors did in fact confirm the *a priori* evaluations of the significance of the factors in question. Of the five factors (F_1, F_2, F_4, F_5, and F_7), four were found to be pertinent to Q group differentiation (the fifth, F_5, being included in this discussion because its items were relevant to the differentiations based upon the other four).

Factor One (Q Groups 2 and 4)

The first factor in a factor analysis based on frequency of occurrence data is generally viewed as related to size or to the productivity of a set of items, and this obtains in the present case. F1 happens also to be the factor of English dominance. With respect to the statistically eligible F_1 items listed in Table 2 it will be noted that there is a preponderance of items in negative relation to the factor, six of which are Spanish items and two of which are Spanish interference items. (Negative loadings indicate that the people who speak the most English use these items least, and conversely people who use these items most do not speak a great deal of English.) It is no surprise that Q_2, the largely U.S. born and educated group, ranks highest on this factor, as it does on the standard English factor, F_7 below. But the reverse ranking is of greater importance since it helps define which among the Spanish dominant groups is least English-speaking and enumerates the features of Spanish articulation which are associated with least Englishness. Therefore we shall discuss Factor 1 primarily in relation to the lowest-ranking or least English group, Q_4, whose low ranking on Factor 1 validates the findings of the global linguistic measurements applied to this group in our demographic-Q group analysis. The only two items on which this group is not absolutely lowest are the two English items that show Spanish interference, UH-3 and EH-3 (talk for tuck, Kant for can't), on which Q_4 ranks next to lowest.

Looking at the Spanish items on F_1, we find that they are all

Table 2

Q GROUP DIFF. BY FACTOR ITEM, BASED ON LOADINGS OVER 50 + ONE SIGMA OF DIFFERENTIATION HIGHEST:LOWEST. MINIMUM N = 28

Factor #	Item #	Lang-Style	VBL & VAL		Q_1	Q_2	Q_3	Q_4	Sigma
1	25	PRS-B	SC-2	E	6.80	☐ 6.50	14.89	⬚ 14.82	7.59
	34	"	VDo-1	dom	1.80	☐ 1.29	2.67	⬚ 4.25	3.00
	36	"	N-2	&	6.50	☐ 5.80	11.78	⬚ 17.18	8.69
	39	"	VN-1	size	8.20	☐ 5.40	13.11	⬚ 15.12	7.19
	48	PRS-A	SC-2		15.25	☐ 6.20	9.67	⬚ 19.79	7.61
	56	"	R#-2		5.25	☐ 2.40	5.33	⬚ 10.71	5.62
	76	E-C	UH-3		⬚ 7.00	☐ 1.91	3.40	5.91	3.63
	79	"	EH-3		⬚ 11.57	☐ .91	5.60	8.45	5.56
	101	E-WN	EH-2		1.80	☐ 7.75	1.00	⬚ .83	4.53
	125	E-B	EH-1		1.80	☐ 5.25	2.33	⬚ .75	2.90
	137	"	R#V-0		16.60	☐ 26.58	⬚ 3.25	⬚ 4.00	14.07
	145	"	TmC-2		10.40	☐ 13.33	6.75	⬚ 5.63	8.17
2	11	PRS-C	#RR-1	Com Sp	☐ 3.86	1.91	⬚ 1.57	2.80	1.66
	124	E-B	UH-3	Acc E	☐ 14.00	2.17	⬚ 2.75	3.38	6.07
	138	"	R#-1		☐ 14.40	3.83	⬚ 2.25	2.63	6.18
	151	E-A	UH-3		☐ 14.60	1.80			8.55
	153	"	EH-3		☐ 20.40	2.18			10.44
4	26	PRS-B	S#-0	Sp	⬚ .75	1.00	☐ 6.00	2.88	3.08
	38	"	VN-0	Zero	⬚ 3.60	5.40	☐ 20.78	9.06	8.70
	46	PRS-A	SC-0		⬚ 1.00	⬚ .60	☐ 3.67	2.50	2.47
	53	"	RC-3		⬚ .25	⬚ .25	☐ 1.83	.50	.94
	54	"	R#-0		2.75	⬚ .80	☐ 5.17	1.64	2.44
	61	"	VN-0		6.25	⬚ 6.20	☐ 17.67	12.07	8.23
5	50	PRS-A	S#-1	Stand Sp	☐ 1.75	1.00	.17	1.50	1.44
	52	"	RC-1	Some ph	⬚ .50	☐ 7.50	2.67	5.00	5.53
	55	"	R#-1	int → E	⬚ 1.50	4.20	2.17	☐ 6.64	4.43
	80	E-C	OH-2		⬚ 3.00	2.64	1.80	☐ 1.55	1.39
	84	"	$R\#_v$-1		☐ 2.14	.70	.25	1.56	1.07
7	96	E-C	CC-0	Stand	1.57	☐ 3.36	⬚ 1.00	1.80	2.02
	100	E-WN	UH-2	E	1.14	☐ 5.00	⬚ 1.50	⬚ .80	2.96
	104	"	OH-2		1.86	☐ 4.25	⬚ 1.67	⬚ 2.07	2.82
	120	"	TS-0		3.80	☐ 10.91	⬚ 4.29	⬚ 2.77	4.63
	140	E-B	VN-1		16.40	☐ 21.42	⬚ 4.00	4.75	15.59

Code: ☐ = highest ranking ⬚ = lowest ranking from consecutive speech, indicating that Q_4 used a larger volume of informal Spanish than any other group. The kind of Spanish used is of some interest. The items describe the most common variety of informal Spanish typical of the Puerto Rican speaker. It is neither a "corrected" Spanish nor a substandard Spanish in terms of norms for the Island. That is, it contains those "deviant" features most typical of the Island dialect: *l* for final *r* and *h* for *s* before a consonant (e.g., *pahtol* for *pastor*). But it does maintain some value for the orthographic attributes, so that even in the most informal speech there is some articulatory realization, in contrast to the possible variety pa'to'. Further, also in relatively informal speech, intervocalic D is maintained, so that *hablado* does not become *hablao*. Likewise, VN receives primary articulation so that *gente* [hente] does not become [hẽte], while final N receives the very common velar articulation, as Bayamóng (but not Bayamṍ) for Bayamón. It is important to note that regardless of the informality of the speech styles represented here, no item in this configuration shows a zero value, and it is for this reason that we describe it as correct for the dialect in the styles in question. This grouping of features relates rather neatly to our demographic and global linguistic categorization of Q_4 as strong on traditional Spanish regardless of formal schooling.

If we may at this point refer to an item on Factor 5, where no single Q group was found to predominate on all items, we will find some further support for the linguistic identification of Q_4 outlined above. We see that item #55 is Spanish R#-1, or the standard variant, [maɾ] for *mar*. Primary value articulation of a feature such as R# might be expected of a group high on formal schooling, as such a group would be assumed to have exposure to a standard contradictory to the Island dialect. This might especially apply to a feature for which standard orthography clearly indicates a correction of the dialect articulation. But we see here, rather surprisingly perhaps, that the group with the most formal education in Spanish ranks lowest in the realization of R/#-1 in Style A, the most informal style, while the least educated group in any language, Q_4, ranks highest. One inference to be derived from this information is that at the overall social level in question, schooling is not seen to be necessarily related to the ability to render certain standard speech forms. From the information we have so far we might say, however, that schooling can be seen in positive relation to the acquisition of English as a second language. We have seen this in the demographic study of Q groups, and it also appears to be so by its contrary since Q_4 is lowest in schooling and lowest in English. But there is no *a priori* reason to expect *lowest* schooling to correlate positively with a somewhat more *careful* Spanish. We therefore must refer to an additional, perhaps more elusive variable, that of traditional culture. We ascribe this to Q_4 by virtue of its being the oldest and most highland group, as well as by the very fact, in association with these two aspects, that it *is* lowest in education. We might say, therefore, that traditional culture, by this limited definition, tends to take the place of formal education in the maintenance of certain standard speech features. By virtue of the linguistic conservatism thus implied, it prevails against the acquisition of English regardless of subject's length of residence in the United States.

Turning to the English end of Factor 1 we find here that the most commonly used English sounds are EH-2 ([æ] as in standard American bad) in word-naming, changing to the local variety, EH-1 as in New York City [bɛᵊd], for the more informal narrative style; R#-0 or "r-lessness" [brʌðə]; and T_m-2 or glottal t in a monomorpheme ([meeʔ]), both in narrative interview style. This presents a very concise outline of local English speech, including style shifting on one variable. Moreover, with the exception of R#-0, these sounds are not available to the person whose phonology remains to any substantial degree Spanish, as they do not resemble any items of the Spanish phonological repertoire. Thus the largest volume of English speech also contains the most representatively English sounds (by local standards), without representation of interference features. Q_2, which ranks highest on these items, also ranks highest on negative use of interference sounds. In other words, the most English is spoken by those who dominate English phonology. For the three items representing consecutive or narrative speech, we may further note that the most representative sounds in English are all sounds that might be termed substandard or lower-status sounds on a sociolinguistic scale for English alone, so that the most common English is colloquial. We shall discuss this more fully in the section on F_7, the most-standard-English factor, in which Q_1 ranks highest as it does here. The question raised by a comparison of the most common English features with the most correct English features for this population is one of the differing widths of style range for the two languages used in the community, or differing horizons for sociolinguistic mobility.

Factor Two (Q_1)

Factor 2 contains five items, two of which were produced by just two groups. The factor can be described as one of "accented English" and correct Spanish. Although there is only one item present to represent correct Spanish (#RR1), reference to the original set of factor items from which these five were chosen as statistically most reliable shows the other Spanish items to consist of standard Spanish realizations. We might also describe our single Spanish item as a "schooled Spanish" feature, since it is produced in the consecutive reading style and since it is most produced by Q_1, the group with highest educational attainment in schools in Puerto Rico. Since this item occurred in a closed corpus, we have an absolute standard of scoring. For each respondent, there were five opportunities to use initial rr (Spanish r:ico, as opposed to one of the velar variants [x:iko] as in French rue or as in a trilled version thereof) in this context. Members of Q_1 each used the standard variant close to four out of a possible five times. This is quite high, considering the commonness of the velar variant, which accounted for 76% of all instances of the variable in Style A, and considering that the articulatory distance between the two variants obviates the ability of some respondents to produce the standard apico-alveolar trill at all.* For these reasons also, therefore, we can say that this single item serves adequately as an indicator of ability to produce standard Spanish in a formal context, fulfilling our expectation of Q_1's educational attainment in this regard. Not to overemphasize the importance of schooling as a sole influence in standard phonological realizations, however, we do see that Q_4 ranks second on this item.

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*Note that the value 1 in question here, r:, also includes the pre-aspirated local variant hr.

The other four items (actually three, as two represent the same sound in different environments) show Spanish interference in English speech: two by definition and one by association. UH-3 ([ɔ] for [ʌ], as in *talk* for *tuck*) and EH-3 ([a] for [æ] , as in *Kant* for *can't*) are both substitutions of Spanish vowels for English ones the respondent does not dominate. R#-1 represents the standard retroflex articulation of final [r] , as *mother, brother*. Flap [ɾ] , the Spanish final R was counted along with English retroflex R for this purpose, as opposed to the local dialect's zero realization for English R. It is most interesting to compare Q_1 with Q_2 on these English items. First of all, Q_2 ranks substantially lower than Q_1 on all of the items presented here. This is to be expected for the items of Spanish interference, as we have already found Q_2 to rank lowest on the two interference items in F1, and as the supplementary study (Chapter V-2) shows that certain interference vowels are in strong negative relation to the production of standard English vowels. But the case for R#-1 is somewhat more definitive. Not only did Q_1 rank higher than Q_2 on this standard English item, but it ranked very substantially higher. Thus, not only does Q_2 rank highest on R#-0 on F1, indicating that R#-0 is most English and most in use by the most English-speaking, but it fails to demonstrate any variation on this variable. If it were not for Q_1's behavior, standard English R# realization would receive very little representation in our sample. We can say from that for the present population, articulation of final R in English words joins EH-3 (ah for [æ]) and UH-3 (aw for uh) in the delineation of interference or in separating native and near-native speakers from accented speakers of a certain kind. It could also be said to separate those with secondary education in Puerto Rico from those educated in the U.S.

Aside from the indication that use of final R in English conversational style seems to be proscribed by native fluency, doubtless due to the pressure of the local dialect, the great supremacy of Q_1 in this feature could imply the articulation of English by orthographic standards rather than by auditory ones alone. This would especially appear to be true in association both with the relatively high educational attainment of Q_1 and the fact that this group is 85% biliterate so that they have easy access to the written word as a source of information and suggestion. This means of obtaining articulatory cues could obtain only in the absence of peer group dialect pressure in English at the time education takes place, as is in fact the case with Q_1. For this reason let us hasten to add that the same orthographic influence is not likely to prevail in the spoken informal Spanish of Q_1, as evidenced by referral to item 55 in F5 below, where we find Q_1 lowest in the articulation of R#-1 in Spanish in the context given. The implication to be derived from this, then, is that peer group is most likely to determine articulation in the primary language, while orthography forms a substantial influence, for those who have access to it, in the articulation of the secondary language. The suggestion of orthographic articulation is also supported by the behavior of the other two Spanish-speaking groups, who rank low both on English R#-1 and on education.

It has been suggested that formal study of English in Puerto Rico as part of the high school curriculum could account for the use of the standard R. Two of the respondents in Q_1 did claim to have studied English in Puerto Rico, and these could have influenced the sample, but in most cases the study of English in Puerto Rico, by an informal reckoning, seems to provide a reading rather than a speaking

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knowledge of English. Therefore, we do not believe this to account for the articulation of R#-1 in English by Q_1.

Factor Four (Q_3)

Factor 4 contains six items comprising five linguistic values of unmistakable homogeneity of realization. We had termed this the apocope factor before the cut-off selection of items was made. The results of item selection in accord with our criteria are all the more rewarding in their absolute reinforcement of this characterization. It will be noted from the chart that every item describes zero realization of the variable in question, except perhaps marginally #53, which describes the assimilation of Spanish R to a following consonant. We shall regard this as a form of zero realization. Not only do the items in question describe a distinct pattern of behavior, but they also represent virtually all the important Spanish variables. A possible exception is RR, but this was a variable with a fairly low functional load. We do note that the highest ranking group in question here, Q_3, ranked lowest on the realization of RR-1 on the preceding factor. Nevertheless, this variable does not appear to be in strong relation to the items for which zero is a possible realization. All the items refer to continuous spoken style, two in the next most informal style and four in the most informal style. They are: S#-0, or no articulation for final /s/(i.e., má' for más, as opposed to the very common intermediate variant, máh); VN-0 (hẽ'te for gente); SC-0 (puetto for puesto, instead of the possible intermediate articulation puehto); RC-3 (patte for parte, as distinguished from the most common informal articulation palte); and R#-0 (hablá for hablar or dialect hablal).

Q_3 takes on definition as a group by means of its consistent high ranking on this well-defined set of items, in association with its global linguistic evaluation as the most limited of the groups in its Spanish repertoire range. We might generally describe Q_3 as the most linguistically limited overall. For not only is it the only group for whom none of the members commands three Spanish styles, but it also has a substantially higher percentage of its members in the one-style Spanish repertoire range category: 44% as compared with 00% for Q_1 and 12% for Q_4. It is exceeded only by Q_2 in percentage of one-style Spanish speakers; and Q_2 members, we recall, are all fluent in English. Q_3 does appear to command more English than Q_4, but it is not considered a bilingual group on the whole, as two-thirds of the group show heavy phonological interference from Spanish in their English or are virtual Spanish monolinguals. But Q_4 has far greater stylistic flexibility in its native language, with 41% of its members commanding three styles as opposed to 00% for Q_3. Thus we can characterize Q_3 both as most limited in terms of linguistic repertoire and as exhibiting the most informal realizations within this stylistic limitation.

This phenomenon has an additional dimension beyond the present context of discussion, in that it describes what many informal Spanish-speaking observers, whether continental South Americans or educated Puerto Ricans, find most "at fault" with the Puerto Rican popular dialect. We have some instances of this generalization on the intellectuals' interviews (Chapter II-3-a), wherein the dialect is criticized not by "They use l for r," as it might be, but by "They drop everything; they eat their words" ("Se comen las palabras").

Here we find that this description applies to a particular segment of the population. It is not known how much Q's 1 and 2 would exhibit the same behavior if as much continuous speech had been elicited from them as from Q's 3 and 4, but we do have an indication of Q_1's stylistic range and we do know that Q_4 most typically produces value 1 or value 2 variations rather than value 0. We can probably assert with some safety that widespread zero realization is a phenomenon restricted to a given population segment, but that it does not as yet appear to be associated with any non-linguistic criteria.

The fact that Q_3 cannot be defined by birthplace nor by age nor by educational level makes it difficult to label zero realization as a function of a specific dialect. Further investigation might reveal it to be a sub-dialect of some form, but at present we can only say that it is found in a variety of native speakers of Spanish as well as in some non-native speakers.

There is some indication, as we will show in our notes on clusters and in our comparison of Spanish in a primary-Spanish speaker with Spanish in a primary-English speaker, that whatever its dialect origin or social definition in Puerto Rico, this tendency toward zero realization offers certain conveniences to younger Puerto Ricans learning Spanish in the New York area. The fact that apocope exists as a version or stratum of an actual Puerto Rican speech group provides the justification for young speakers to simplify generally in their own adaptation of apocope Spanish. We are led to believe, therefore, that by virtue of its very demographic heterogeneity Q_3 is the group representing New York Spanish and the dialect version that gives rise to it. We could alternatively describe Q_3 as the group of linguistic instability or flux, the group that refers least to any standard of formal langue. Since this lack of standard reference represents the state of the Spanish language in New York, we might by extension say that Q_3 stands at the point of change for Spanish as a New York City language, other influences (such as educational mobility or cultural revival) remaining equal.

Factor Seven (02)

Factor 7 is the factor of standard or correct English, and differs from Factor 1 in that the latter represents volume of productivity for English of whatever kind, while the items of F7 are clearly those representing certain features of standard articulation. While not all variables considered sociolinguistically representative of standard English are encountered on F7, it should be noted that no item on F7 shows any reduction or interference. We shall also discuss below the implications of the principal item of standard articulation which does not appear on this selected factor.

Three out of the five items on F7 are from the intermediate style, word-naming, which comprises elicitation of spontaneous word lists. As was shown in the discussion of variables by environment and context, WN usually clusters together with spoken style toward the more informal end of speech style range, and serves on the scale as a watershed for informal style. Still, it is generally the most careful of the spoken styles. One each of the other two items on F7 is from a more formal and from a less formal style than WN. The factor notably does not include EH-2 nor R#-1, two other probable indicators of most correct English in our study. The absence of R#-1 is of particular interest.

Returning for a moment to the first factor, we recall that R#-0 was a high productivity item in English, with Q2 ranking highest on English items throughout. Viewing the very high volume of production of R#-0 in interview style for Q2 in the first factor, then, we should, perhaps, not be surprised that F7, the most correct English factor by the present analysis, does not include this feature. Appropriate use of [ʌ] and [æ] , as shown in F1, can be taken as measures of Englishness of articulation, as neither of these sounds is available in Spanish although both are standard, if not actually unanimous, in New York usage. School, other formal influences (such as possibly television), as well as peer group use would all reinforce the use of these sounds. Peer group usage would also encourage T-2, glottal final /t/, and R#-0 as American sounds, that is, as sounds least deviant from local English speech.

Most of these sociolinguistically significant English items on F1 and F7 show either the standard English variant or fluctuation between the local variant and the standard one. Tm-1, for instance, appeared on the original Factor 7, even though it did not qualify for inclusion in the table by all selection criteria employed. But R# appears in only one realization, the substandard or local zero variant. This raises a question as to what constitutes "correct English," if R# is not open to correction, and if final T is only marginally so. Our hypothesis here will be that, for most of our respondents, the local dialect itself is the horizon for Englishness or Americanness.

Our percentage charts earlier in this chapter for performance on R# variables in two environments also bear this out to some degree. For R#V, i.e., where the next word begins with a vowel, performance for all respondents exhibited very little change over the range of styles. R-0 was rendered 46%, 51% and 48% of the time for styles C, B, and A, respectively, indicating a lack of variation on the part of respondents with increased formality of situation. The percentages for R# (sentence final or next word #C) exhibit somewhat greater range, but in the most formal style, R-1 accounted for only 45% of the cases, going down to 27% for the least formal style. Reference to the factor from which the items on F7 were originally abstracted does show RC-1 (as in dark) in positive relation to the factor, but with a loading of only 33. A review of the percentage charts shows that the standard R is more likely to occur before a consonant than finally, so that the low loading of the preconsonantal R indicates an even lower likelihood of occurrence of R# on a "corrected English" factor. Further corroboration of Q2's R-lessness can be obtained by returning to F2, where there is an entry for R#-1 in B style. This does not tell us much of the group's ability to correct to R-1, since the style is relatively informal. But we cannot avoid noticing that the distance between the two groups likely to use this English style at all is extremely marked on this particular item. Q1 uses R#-1 on an average of 14.40 times per person as opposed to Q2's 3.83 average usage, with a standard deviation of 6.18 marking this as a wide margin indeed.

In apparant contrast to this is Q2's performance on items 52 and 55 in F5, in the most informal Spanish style. In support of the argument against parallel behavior or interference in the use of R, Q2 scores highest and next-to-highest on the use of RC-1 and R#-1 in Spanish. Thus the overall finding suggests a strong peer group influence against R-fullness in any style in Q2's English. Aside from the obvious inference by Labov's measure that this behavior conforms to lower-class status, we could go on to suggest that sociolinguistic mobility for this population is represented by conformity to the immediate environment rather than to any outside standard.

That is not to say that there is no sense of style range in English. To return to the factor under consideration, and to corrected English behavior, the three consonant items encountered refer to some form of cluster behavior. (VN was measured both in cluster and simply.) The obvious generalization from this information is that correct articulation as measured here refers to full value for consonants in cluster plus appropriately lax or mid sound for certain vowels. Thus the corrected style would be represented by full articulation for words such as *kept* (rather than *kep'*), *hats* (rather than *ha's*) or *eats* (rather than *eat*), and *pan* or *pencil* (rather than *pã* or *pẽ'sil*).

These items do not mark the boundary between the overall dialect used in the area and some more elite group. But zero realization in the clusters mentioned is a likely marker of local Negro speech (Labov 1965b), while R-lessness and glottal T are features shared across local sociolinguistic groups. The likelihood, then, is of a fairly clear sociolinguistic perception by young Puerto Rican English-speakers of the boundaries delineating white from Negro speech, but a failure generally to perceive levels of prestige in white speech.*

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*This obviously does not apply for all respondents. Lucy R., a Puerto Rican college girl, corrects for R. In the other direction, Juan H., a gifted style-switcher and something of a hipster, seems to prefer the Negro dialect as measured by reduction of consonant clusters. He uses a great many of these reductions as the prestige manner for discussing certain hip topics, though he corrects these features for reading.

Summary and Conclusions

We have found that contrasting demographic and global linguistic characteristics of groups that exhibit high within-group similarity and high between-group dissimilarity across all phonological items provides a meaningful picture of sociolinguistic variation in our population. In addition, we have found that contrasting the discrete phonological behavior of these groups also yields meaningful and consistent results. The Q group and R factor analyses clarify and reinforce each other. A summary of our findings is presented in Table 3.

Table 3

SUMMARY OF Q AND R ANALYSES

	Demographic & Global Linguistic Characteristics	Phonological Behavior
Q group		
Q_1	Young adult females of coastal origin with more than 7 years schooling in Puerto Rico, speaking fluent but accented English and using two or more Spanish styles.	High incidence of English vowels showing Spanish interference. Highest ranking group on English final R indicating possible orthographic influence. Standard Spanish [ɾ:] in reading.
Q_2	Mostly under 18, American-born or U.S. educated, fluent in local English, but 50% one-style Spanish speakers.	High incidence of standard English vowels and local English variations. R-lessness in English with correction only for consonant cluster reduction reveals perception of Negro dialect boundaries but not of any white standard beyond the neighborhood's.
Q_3	Range of age, education and birthplace and, as a result, no real deomographic definition. Range of English ability with 2/3 showing heavy Spanish interference or being Spanish monolinguals. Only group with no 3-style Spanish speakers.	Uniform apocope for all key Spanish variables on which Ø a variant.
Q_4	More than half highland-born, of low education, with very little English mastery, but 88% with two or three styles in Spanish.	Use of standard Spanish variants except for Island dialect features [ɾ → l], [s → h], but no zero realization. Secondary use of standard [ɾ]# in Spanish.

9. General Summary

Underlying our linguistic study of Puerto Rican bilingualism in its New York City community context has been the primary concern to demonstrate the existence of patterned variation amidst code diversity. Our initial assumptions were that bilingual speakers have a repertoire of codes or styles in each language, each of which could be considered as a language variety, and that this repertoire is functionally distributed throughout the community (Section 1). The ranges of code varieties in each language of the PR repertoire were examined in detail by plotting the distributions of six PRS phonological variables and eight PRE phonological variables separately against the dimension of stylistic variation (Sections 4 and 5). Many interesting and revealing stylistic patterns were found in each language, and both phonological and grammatical environments were shown to be influential in these patterns. Questions of structural interference and compartmentalization in relation to the structure of stylistic variation were raised (Section 1) and some of these aspects discussed (Section 5). In certain variables, common linguistic patterns were discovered in the stylistic structures of both languages.

We then proceeded to refine our notion of "style" by studying the cross-language co-occurrence patterns of different phonological variants by means of a factor analysis. Six statistically and linguistically well-defined clusters emerged, which we may think of as speech styles existing in the PR speech community (Section 7). Following that, we inter-correlated all speakers whose linguistic behavior was most consistent on the phonological variants thus dividing the population into four well-defined linguistic subgroups or Q groups (Section 8).

Finally, we showed that each Q group was also clearly differentiated from the others by a number of demographic variables and by the six styles, thus giving a precise sociolinguistic characterization of PR bilingual speakers in the New York City speech community at large. We do not, however, mean to imply that there are no more than these six styles, but that these were the most clearly differentiated in terms of our particular study.

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11. Addenda

I. Some Notes on CR Cluster Behavior in Puerto Rican Spanish and English

A final review of the phonetic transcriptions of interview materials from our 45 Jersey City respondents revealed some clues to types of phonological and phonotactic behavior that merit further research on the part of students of Puerto Rican bilingualism in New York City. One feature proved to be especially interesting upon fairly brief examination. This was the variation of behavior around the use of consonant clusters involving a consonant plus R.

Passages of speech in both languages in B and A contexts (both consecutive speech) and, supplementarily, in the word-naming context, were examined for CR variation. The same passages were also examined for the use of l in place of final and preconsonantal r in English and for h realization of s in SC clusters, but these latter forms of interference were not widespread enough to display patterns in conjunction with any other features. However, CR behavior did reveal significant patterning, both in terms of the variants of R used in this position in both languages by given individuals, and in terms of patterns displayed by certain types of speakers. Our report of this patterning is presented as an addendum because the examination was made near the end of the research period, so that neither time nor the established methodology allowed for its inclusion in the major analysis of phonological behavior across a range of contexts for all speakers.

Two principal types of behavior were evidenced with regard to post-consonantal R: 1. Speakers who used any one of the alternate variants of [ɾ] in Spanish, [ʁ, r, Ø]* tended to use all variants. 2. Speakers for whom Spanish is the secondary language, principally young people born in the U.S., show a tendency to avoid CR clusters in their free speech. That is, for a given quantity of consecutive open corpus speech Island-native speakers will employ approximately twice as many words with CR clusters as U.S.-native speakers. This does not hold for elicited word lists.

Another interesting point was also brought to light: There is greater tendency to use the Spanish flap [ɾ] in cluster than finally for English speech where this phone occurs. Most of those who use [ɾ] finally use it throughout, whereas those who use it occasionally in cluster may never use it finally.

Procedures

Two procedures were employed. In the first examination we reviewed the phonetic transcripts for all respondents in both languages, regardless of the size of the corpus. Every time a CR cluster occurred it was scored for one of these realizations: [Ø, ʁ, r, ɾ]. Each respondent had a line on the sheet, so that his responses could be counted and his performance viewed across a possible range of behavior. In the process of looking for these clusters, it was noticed that fewer could be found in the Spanish free speech transcripts of those young respondents known to be primarily fluent in English. Therefore, a count was made of CR in these transcripts in which the quantity of words examined was *controlled* and this count was compared with a portion of speech of equal length from the transcripts of native speakers. In two cases it was possible to compare mothers with daughters.

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*These sounds can be explained as follows: [ɾ] is the standard Spanish flap r, as heard in Spanish tren, and corresponding in articulation to the sound orthographically represented by t in American water; [ʁ] is the velar sonorant found in most typically French articulation, e.g., très; [r] represents English retroflex, found randomly in PRS speakers regardless of mastery of English; [Ø] signifies no sound for the orthographic r after a consonant - quite possibly, this is the velar variant rendered too laxly to be recorded. All of these realizations were found in both languages, but range of variation was greater in Spanish than in English. In English, variation was most often a result of interference, whereas in Spanish variation represented phonological fluidity.

Spanish CR clusters

All but one of our 45 subjects made some response in Spanish in one of the three contexts in which CR clusters were counted. Eighteen were observed to use a variant other than [ɾ] in this position more than twice, and thirteen of these eighteen used both [ɹ] and [r] as variants. Nine respondents used [0] in place of the standard [ɾ] after a consonant. All of these used some other variant as well, six using *all* other variants and only one using as little variation as [0] and [ɹ], which seem to go together. Of the cases in which there were enough instances of variation to determine dominance of one alternative over another, [ɹ] seemed to dominate, while [r] had a slightly wider spread in isolated instances. There were no respondents for whom the use of alternate variants outnumbered the use of [ɾ], so that for all speakers this sound remains the acknowledged standard, while 18 out of 43 speakers also use [ɹ] or [r] and most likely both. No formal account was made of environments. One bilingual speaker used [ɾ, ɹ, r] in three different instances of the same word in one passage. Two young adolescent respondents whose Spanish is insecure also used C as a variant of C[ɾ]: *pleguntal* for *preguntar*. Younger speakers were also observed to use *l* intervocalically in place of [ɾ] (*palada* for *parada*), a variation almost never utilized by native speakers.

It was not possible from this informal study to determine a relationship between the use of post-consonantal [ɹ] in English with the same feature in Spanish. Out of the seven instances of this feature in English, only four were among the 19 respondents scored as having used C[ʁ] at all in Spanish. On the other hand, informal observation suggests that those one or two speakers who use [ʁ] initially in English for [r] use the velar variant regularly in Spanish.

One might expect the use of C[r] in Spanish to relate negatively to the use of C[ɾ] in English since the former resembles an English interference feature and the latter is clearly a Spanish interference feature. But this does not seem to be the case. Rather, the use of [r] in Spanish seems to be part of a fluid tendency in the R phoneme. It is difficult to say whether or not this fluidity is also realized in the English usage of the same speakers. It is true that 18 out of the 21 respondents who used C[r] at all in Spanish also used C[ɾ] in English. The converse does not hold, however. C[ɾ] is very widespread in PRE, being found in individual instances even in the speech of those for whom English is the primary language. In all, 26 out of 39 speakers for whom conversation or reading was recorded in English used C[ɾ] in English more than twice. Four others used it once or twice, and of these, three were virtual native speakers of English.

Thus we see two somewhat different types of behavior centered around similar phonological constructions. In Spanish, we can add CR cluster behavior to the fluidity of R in preconsonantal and final as well as in initial position, with the distinction that preconsonantal and final R exhibit a different phonological range from initial and postconsonantal R. In English there is also variation in the use of R, but mostly as a function of interference or residual interference. While the range of sounds used for R in all positions in English is here identical to the range in Spanish, the exploitation of the range is very much narrower, being for all practical purposes limited to variation between the flap and the retroflex realizations of R, or Spanish vs. English Standard R.

Six persons in the sample did use l for r in English in final and preconsonantal position more than once, but this does not appear to be typical of interference behavior in general. This realization would probably be found to be limited to those with almost no phonological differentiation between English and Spanish, very little use of English, and a narrow repertoire range in Spanish. For while r → l is a very widespread feature in our population's Spanish usage (see Section V), it is a feature which for some 75% of our Spanish speakers does not constitute an interference option.

Returning to the fluidity of R in Spanish as expressed in consonant-R behavior, it is interesting to observe the behavior exhibited by younger speakers for whom Spanish has something of the nature of a second language. Three girls were selected from the sample on the basis of being primarily English-fluent but having produced a reasonable quantity of conversation in Spanish. Their speech was compared with that of three older women who are primarily Spanish-speaking, only one of which is at all bilingual. Two of the pairs are mother and daughter. The results are shown in the table below.

	Speech Context WN		Speech Contexts A-B	
Respondent	#Words	#CR	#Words	#CR
S^1:JR	50	10	150	14
E^1:LR	50	7	150	7
S^1:JG	38	3	140	10
E^1:MR	50	3	140	6
S^1:LS	40	2	130	15
E^1:ES	40	5	140	3

We must begin the discussion of this comparison by acknowledging the small size of the sample. However, we do feel that the consistency of the results for speech contexts A-B is sufficient to warrant interest and hope that it may point to an area for future linguistic study of Puerto Rican Spanish in New York City.

First of all, we note that in speech context WN, the CR count for a given number of words appears to be fairly random at this volume. In other words, there is no patterned variation among speakers, and unless a count on a larger number of single words should prove otherwise, we would assert that the two sets of speakers are comparable in their use of consonant clusters in word-naming, all other things, such as vocabulary, being equal. In effect, this eliminates vocabulary from a rationale for differential use of CR consonant clusters, since in a random selection of isolated words as many CR clusters occur to one type of speaker as to the other. Comparison of the A-B speech context reveals more consistent and differentiated behavior, however. The number of words counted is relatively low in order to make the counts for different sets of speakers comparable, but the pattern is nonetheless clear. The younger speakers use an average of 43% as many CR consonant clusters as the older speakers.

This comparison was revealing for the writer. It had seemed before this that the Spanish of younger speakers was definitely simpler or "flatter" in some way than native Spanish usually sounds. But it was clear, both on first impression and after examining the phonetic transcripts, that these speakers were able to make all the basic sounds of Spanish. Other phonotactic comparisons have not yet been made between older and younger or Spanish-primary and English-primary speakers, but in the light of the findings above, it seems that such an investigation would be worthwhile. There are doubtless other simplifications as well, although the present one seems especially favored by the ambiguity or fluidity of the R feature in the Puerto Rican dialect.

II. A Suggestion of Morphological Apocope in Second Generation Spanish

Another speech feature which may be subject to simplification for slightly different reasons is the morphological bit, such as a, de, en, and certain verb inflections, which in the rapid colloquial speech of a native speaker receives minimal but audible articulation. Comparison of the Spanish speech of a seemingly fluent English-primary speaker with that of a highly colloquial native speaker reveals the greater absence of these bits in the rapid speech of the former.

Thus, in the speech of Emily S., whose primary language is English, there were cases of ambiguous number, ambiguous verb inflection, and a failure of verbs to agree in time in the same utterance period. Contrastingly, the native-Spanish respondent, Margarita M., maintained maximal grammaticality regardless of very informal speech, compounded with her Rio Piedras dialect: her universal use of velar [ʀ] and [l] for final [ɾ], etc., as well as to her way of stringing utterances together very rapidly, according to the dictates of an intonation pattern which required a strong rise and stress at the beginning of a breath, a secondary rise and stress close to the end, with an apparent disregard of the quality of articulation in between. This style of communication appears to be extremely code-like, that is, it is not necessarily intelligible to another native speaker of Spanish, requiring clues of topical context and careful listening in order for many of the utterances in a taped sample to be understood. Close examination of this person's speech revealed that while syllables were often dropped from words in rapid speech morphemically functional items always received some articulation, however minimal.

We know of our non-native Spanish-speaker that she has received no formal education in Spanish, and began picking the language up for social purposes in early adolescence when she first went to Puerto Rico. In Jersey City it is likely that her contacts in Spanish are with young women like the second speaker described above, that is, contacts in very informal situations with colloquial speakers. We infer from this and from her speech that either she does not perceive the inclusion of these morphological particles in fast speech and considers them optional, going on to exercise the imagined option to drop them, or she cannot accommodate them in her rapid speech, i.e., doesn't hold them as internalized and doesn't include them from insecurity over the options, trusting their absence will go unobserved because of the rapidity of the utterance. We would compare the implications of ES's speech here with the findings on the linguistic behavior of Q3 (of which ES is a member) in Section 8 of this chapter. We considered speech behavior exhibited by this group to mark the point of flux for phonetic realizations which are ambiguous in PR Spanish, so that the zero realization is the option taken from the range of Island variations by these speakers. We expect that many young speakers for whom Spanish is virtually a second language will tend to exercise the zero option for ambiguous cases. We saw this borne out in our investigation of CR usage above (Addendum I) as well.

An actual comparison will not be undertaken here as a number of subtle variables are involved, and the problem deserves a thorough and meticulous treatment. In addition to apocope tendency and absence of grammatical awareness on the part of the second generation speaker, the investigator ought also to consider such factors as elision patterns of the native group, grammatical redundancy, intonation patterns, and the problem of differential timing systems in English and Spanish (for a discussion of PRS versus English timing, see Allan Coggeshall, "The Timing of Puerto Rican English," unpublished manuscript, Columbia University, 1968).

A selected set of examples from the speech of our two speakers is given below. A comparison of the phonetic transcript with the orthographic will show considerable apocope in the speech of both young women, but in the case of MM the features dropped are non-morphemic. Phrase two gives a typical example of elision in which de is implied in the replacement of [-o̧ðɛ̧ʂ-] by [œ]. The underlined spaces in ES's sentences show missing morphs, while underlining in MM's marks the presence of morphs.

Examples

MM	1.	kɛl oto ʰtaɨ̲̃ pimɛ́gɓ̀aðo	Que el otro está en primer grado.
	2.	ŋkasœ̲mɛɦɛ̃́sya	En caso de emergencia.
	3.	ɛn tṻkáhɯŋkaẗɨṽ̲χoɓáo?	En tu casa nunca te han robado?
	4.	mɨmandó_ᵄ ɦɓegaˡ , pwɨ nwɛɾɐ míο, ɛɾɐ ð̲ɛ̲̃ mi mɐðahẗa	Me mandó a regalar, pues no era mío, era de mi madrastra.
ES	5.	lo kɛl asɨ_mí no mɨɣuhtä	Lo que él hace, a mi no me gusta.
	6.	kon_ɛmano, y̌əablɔ kon_ɛmano ˀðɛl kɛ biβɛ_fɾɛntɛ_kasɐ	Con el hermano, ya hablo con el hermano de él, que vive al frente de casa/frente a casa.
	7.	ɨ̲y̌ə nɷ mɨ_kə̃ṫɨṫaw	Yel^la no me ha contestado.
	8.	el biβɛ solo_ʔũ̆fʊ́nɪšũ̆ˀ _ɛ no lɨ gutta βiβi kõ̆ la hɛ̃tɛ	El vive solo en un furnished room. A él no le gusta vivir con la gente.

12. Appendices

12.1. READING TEXTS

Style D, Isolated Word List

Spanish	Subvariables		
mismo	SC		
recogido	#RR	VDo	
escuchado	SC	VDo	
muñecas	Spl		
corredor	VRRV	R#	
perdidos	RC	VDo	Spl
escrachao	SC		
carpeta	RC		
usted	SC		
English			
brothers	UH	RC	Spl
lovely	UH		
glasses	EH	Spl	
dozen	UH		
disease	S#		
mast	EH	STm	
stuffed	UH	Tp	
cheers	RC	Spl	
matting	EH	NGvb	
dance	EH	VN	Sm

Spanish Style C, Connected Texts

(Subvariables are marked appropriately for each occurrence)

```
I. Por la tarde hizo calor, pues fueron al mar y se echaron debajo de
     R#     RC           R#    S#     N      R#           N

   un arbol.  Flor y Angel quisieron tomar sol.  Leonor les hizo ponerse
    N  RC        R#  VN            N     R#           R#  Spl        RC

   crema para no quemar la piel.  Despues de poco tiempo, los  dos mu-
                      R#            SC  S#         VN      Sa    S#

   chacnos se fueron a buscar conchas marinas.  El ano pasado, habían
        Spl        N     SC R# VN   Spl     Spl           VDo      N

   recogido algunos pero esta vez, querían unas más grandes.
   #RR   VDo     Spl      SC    S#      N     Sa  S#  VN  Spl


II. Como es de suponer las noches de debut o estreno en cualquier cabaret
          Sv         R# Sa      Spl           SC                R#

    o club nocturno son noches especiales.  En esta ocasión al "Alameda"
                RC    N     Spl SC      Spl  N  SC       ON

    se dieron cita, la noche de la reaparición de Rocío de Granada, su
            N                      #RR      ON    #RR

    tío el guitarrista Sabica; el conocido y muy estimado hombre de
               VRRV SC                 VDo        SC  VDo  VN

    empresas Manuel García Busto, acompañado de su gentil esposa y su
          Spl         RC     SC          VDo               SC

    encantadora hija, que reside en Espana; Bobby Capó, cancionista y
                          #RR                                   SC

    figura de relieve en la T.V. hispana en Nueva York.
              #RR     N     (ON)   SC     N
```

English Style C, Connected Texts

(Subvariables are marked appropriately for each occurrence)

I. One of my best friends is named Harry. He's always trying to act like
UH AY STm VN TSp Sv VN Tp EH Sv OH Sm AY NGvb EH AY

a real tough guy. His mother doesn't like it because he uses bad
UH AY Sm UH R# UH AY Tm OH,Sm Sv EH,Tm

language. In fact, she can't stand it. The other day, she asked
EH,VN EH EH,VN EH,VN Tm UH R# EH Tp

him what he was trying to prove and he mumbled something like "I don't
VN Tm AY NGvb UH,VN,Tp UH,VN NGno AY AY VN

know" and shuffled his feet like a lost puppy. Last year, he didn't
UH Tp Sm Tm AY OH,STm UH EH,STm R#

seem as bad as this year. Even his teachers can't keep up with him
VN EH,Tm Sm R# Sm RC,Spl EH,VN UH VN

and leave him alone.
VN VN

II. An all-year, glass-enclosed swimming pool, the first of its kind in
OH R# EH,S# STp NGno RC STm TSis AY,VN

the city, will be built in Commodore Barry Park in Brooklyn. Completion
CC R# EH RC

is expected in 1968. According to the plans, the pool will be built
Sv Tp AY,VN,Tm RC NGno EH,VN,Spl CC

at the corner of Navy and Nassau Streets. The pool will be operated by
RC R# EH TSpl Tp AY

the Department of Parks and will serve the area which includes Fort
RC RC,Sp RC TSv RC

Green. It is designed for youngsters and teenagers, but there will be
VN Tm Sv AY,VN,Tp R# UH RC,Sp RC,Spl Tm R#

a balcony for adults.
EH R# UH,TSpl

12.2. Variables and Phonetic Values

SPANISH VARIABLES

Variable	Code	Phonetic value	Phonetic transcription	Orthographic transcription
(S)	S-1	[s]	[ɛskwela, los]	escuela, los
	S-2	[h]	[mihmo, ɛh]	mismo, es
	S-0	[Ø]	[do]	dos
(RL)	RL-1	[ɾ]	[kaɾne, poɾ]	karne, por
	RL-2	[l]	[pɛldɛl]	perder
	RL-3	[C:]	[fwɛssa]	fuerza
	RL-0	[Ø]	[presentale]	presentarle
(D)	D-1	[ð]	[ɛntɾaðo]	entrado
	D-0	[Ø]	[lao, ablao]	lado, hablado
(N)	N-1	[n]	[ablan]	hablan
	N-2	[ŋ]	[paŋ]	pan
	N-0	[ṽ]	[pã]	pan
(VN)	VN-1	[v́N]	[ɛhémplo, ɛ́ntre]	ejemplo, entre
	VN-0	[ṽ]	[ɛntɔ̃se]	entonces
(ON)	ON-1	[yón]	[aksyón]	acción
	ON-2	[yóŋ]	[bisyóŋ]	visión
	ON-0	[yõ]	[aksyõ]	acción
(RR)	RR-1	[ʰɾ ,ǰ̣ ɾɾ]	[ɾɾegalo]	regalo
	RR-2	[ǰ̣]	[kaǰ̣o, ǰ̣iko]	carro, rico
	RR-3	[X,ʁ]	[kaXo, ʁiko]	carro, rico

ENGLISH VARIABLES

Variable	Code	Phonetic value	Phonetic transcription	Orthographic transcription
(UH)	UH-1	[ɑ́]	[kɑ́m]	come
	UH-2	[ʌ́]	[lʌ́k]	luck
	UH-3	[ɔ́ᵐ]	[mɔ́č]	much
(EH)	EH-1	[ɛ́, ɛ́ᵊ]	[kɛ́n, bɛ́ᵊd]	can, bad
	EH-2	[ǽ]	[hǽt, bǽd]	hat, bad
	EH-3	[á]	[kát]	cat
(OH)	OH-1	[ó, óᵊ]	[tók, móᵊ]	talk, more
	OH-2	[ɔ́]	[bɔ́l]	ball
	CH-3	[ɒ́]	[tɒ́k]	talk
(AY)	AY-1	[á]	[má]	my
	AY-2	[áɪ, ǽɪ]	[sáɪd, fláɪ]	side, fly
	AY-3	[ái]	[ráit, hái]	right, high
	AY-4	[ɑ́ɪ, ɑi]	[mɑ́ɪ , rɑid]	my, ride
(R)	R-1	[r, ɚ]	[hɚ, hɑrd]	her, hard
	R-0	[Ø]	[kɒ, poᵊt]	car, port

ENGLISH VARIABLES (cont'd)

(VN)	VN-1	[v́N]	[sʌ́m, pέnsəl]	some, pencil
	VN-0	[ṽ]	[plæ̃]	plan
(NG)	NG-1	[ɪn]	[sʌmθɪn, duɪn]	something, doing
	NG-2	[ɪŋ]	[siyɪŋ]	seeing
	NG-0	[ɨ̃]	[θĩ, tekɨ̃	thing, taking
(Tm) (Tp)	1	[t,d]	[wat, əbaut, sɛd]	what, about, said
	2	[ʔ]	[waʔ, hɪʔ, šautɨʔ]	what, hit, shouted
	0	[Ø]	[wa, əbau, pərei]	what, about, parade
(Sv) (Spl) (Sm)	1	[s]	[sɛz, goz, dɪšɨz]	says, goes, dishes
	0	[Ø]	[sei, go, wašɨ]	says, goes, dishes

Consonant cluster simplification:

1	1st member reduced
2	2nd member reduced
0	no reduction

(STm)	[fæst, tɛst]	fast, test
(STp)	[pæːst, kɔːzd]	passed, caused
(TSis)	[wats, ɪts, ðæts]	what's, it's, that's
(TS)	[hɪts, wants, ɛnds] [bæts, pɑts]	hits, wants ends bats, pots
(CC) (all other clusters)	[lʊks, salt, lʌmp]	looks, salt, lump

12.3. Data Processing Codes

Card	Col.	Item/description
1	1-5	Identification: study (1); subject (2-4); card (5)
	6	Interviewer: 1 = HC; 2 = EH; 3 = FS; 4 = DS; 5 = RM; 6 = JG
	7	Sex: 1 = Male; 2 = Female
	8	Birthplace: 1 = US; 2 = San Juan; 3 = PR urban > 10,000 includes: Aguadilla, Arecibo, Bayamón, Caguas, Cayey, Coamo, Fajardo, Guayama, Mayagüez, Ponce); 4 = PR urban < 10,000; 5 = PR rural < 5,000-coastal; 6 = PR rural-highlands
	9	Transcriber: 1 = RM; 2 = EH; 3 = formal by RM; informal by EH
	10	Scale of Spanishness: 0 = virtually Spanish monolingual; 1 = heavy phonological & syntactic interference from S to E; 2 = moderate phonological & syntactic interference from S to E; 3 = slight phonological interference only from S to E; 4 = maximal language distance between S and E; 5 = slight phonological interference E-S and S-E; 6 = slight phonological interference from E to S
	11	Elicited Bilingualism: 0 = NA if monolingual; 1 = subject appears to speak E fairly well but interview did not elicit satisfactory amount of E; 2 = subject appears to speak S fairly well but interview did not elicit satisfactory amount of S; 3 = interview elicited satisfactory amount of E and S, given the degree of bilinguality;
	12	Scale of Reading ability: 0 = doesn't read either S or E; 1 = reads S but not E; 2 = reads both E and S but E with some difficulty; 3 = reads both E and S fluently; 4 = reads E easily but S with difficulty; 5 = reads E but not S.

12. Appendices

Card	Col.	Item/Description (Linguistic subvariables & values - see Style Sheets)
1	13-58	Span. Style D
	59-76	Span. Style C
2	1-5	Identification
	6-71	Span. Style C (cont.)
	72-77	Span. Style WN
3	1-5	Identification
	6-73	Span. Style WN (cont.)
	74-79	Span. Style B
4	1-5	Identification
	6-77	Span. Style B (cont.)
5	1-5	Identification
	6-35	Span. Style B (cont.)
	36-75	Span. Style A
6	1-5	Identification
	6-69	Span. Style A (cont.)
	70-75	Engl. Style D
7	1-5	Identification
	6-41	Engl. Style D (cont.)
	42-75	Engl. Style C
8	1-5	Identification
	6-73	Engl. Style C (cont.)
9	1-5	Identification
	6-61	Engl. Style C (cont.)
	62-79	Engl. Style WN
X1	1-5	Identification
	6-77	Engl. Style WN (cont.)
X2	1-5	Identification

Card	Col.	Item/Description (Linguistic subvariables & values - see Style Sheets)
X2	6-37	Engl. Style WN (cont.)
	38-79	Engl. Style B
X3	1-5	Identification
	6-73	Engl. Style B (cont.)
X4	1-5	Identification
	6-61	Engl. Style B (cont.)
	62-79	Engl. Style A
X5	1-5	Identification
	6-37	Engl. Style A (cont.)
X6	1-5	Identification
	6-73	Engl. Style A (cont.)
X7	1-5	Identification
	6-53	Engl. Style A (cont.)

Card	Col.	Item/description
X7	54	Interview atmosphere: 1 = normal manner generally maintained through all tasks; 2 = formal manner generally maintained; 3 = nervous or uneasy manner generally maintained; 4 = overly casual manner generally maintained
	55	Educational level (based on highest level achieved): 0 = NR; 1 = less than 6th grade in PR; 2 = less than 6th grade in US; 3 = from 7th to 9th grade in PR; 4 = from 7th to 9th grade in US; 5 = from 10th to 12th grade in PR; 6 = through 12th grade in US; 7 = college (US only)
	56	Repertoire range (assessed for total interview) - spoken Eng.: 0 = NA; 1 = no range, only knows a few words & phrases; 2 = one-style informal with limited fluency for perfunctory, brief conversations; 3 = one-style informal for all conversations, has fluency; 4 = one-style formal, with little style shifting; 5 = two-style speaker, shifts from intimate to more careful style; 6 = maximally fluent in style shifting
	57	Repertoire range (assessed for total interview) - spoken Span: 1 = one-style speaker with little shifting; 2 = two-style speaker, shifts easily from intimate to more careful style; 3 = three-style speaker who could shift presumably from baby-talk to more formal interview style; 4 = maximally fluent in style shifting.
	58-60	Interview section(s) missing: 0 = nothing (i.e. interview completed); 1 = Span. Style C and D missing; 2 = Span. Style WN missing; 4 = Span. Style B missing; 8 = Span. Style A missing; 16 = Engl. Style C and D missing; 32 = Engl. Style WN missing; 64 = Engl. Style B missing; 128 = Engl. Style A missing. GEOMETRIC CODING

12.4. Linguistic Layout - Style Sheets

NAME________________________ SPANISH SPEECH STYLE D
RESP NO.______________________
TAPE NO.______________________
DATE________________________

(Card and Columns #s for Keypunching)

Subvariable			Col/Value		
(S)	SC	Start Card 1	13-4 0	15-6 1	17-8 2
	S#		19-20 0	21-2 1	23-4 2
(RL)	RC		25-6 1	27-8 2	29-30 3
	R#		31-2 1	33-4 2	
(D)	VDo		35-6 0	37-8 1	39-40 2
	VD		41-2 0	43-4 1	45-6 2
(RR)	VRRV		47-8 1	49-50 2	51-52 3
	#RR		53-4 1	55-6 2	57-8 3

GO TO SPAN. STYLE C

NAME____________________
RESP NO.____________________
TAPE NO.____________________
DATE____________________

SPANISH SPEECH STYLE C

Subvariable			Col/Value		
(S)	SC	Card 1 (cont'd)	59-60	61-2	63-4
			0	1	2
	S#		65-6	67-8	69-70
			0	1	2
(RL)	RC/N		71-2	73-4	75-6
			1	2	3
	R#	Start Card 2	6-7	8-9	10-1
			0	1	2
(D)	VDo		12-3	14-5	16-7
			0	1	2
(N)	N#C		18-9	20-1	
			1	2	
	N#V		22-3	24-5	
			1	2	
(ON)	ÓN		26-7	28-9	30-1
			0	1	2
(VN)	V́N		32-3	34-5	
			0	1	
(RR)	VRRV		36-7	38-9	40-1
			1	2	3
	#RR		42-3	44-5	46-7
			1	2	3
(Spl)	SpV		48-9	50-1	52-3
			0	1	2
	SpC		54-5	56-7	58-9
			0	1	2
(Sa)	SaV		60-1	62-3	64-5
			0	1	2
	SaC		66-7	68-9	70-1
			0	1	2

GO TO SPAN. STYLE WN

NAME____________________
RESP NO.____________________
TAPE NO.____________________
DATE____________________

SPANISH SPEECH STYLE WN

Subvariable			Col/Value		
(S)	SC	Card 2 (cont'd)	72-3 0	74-5 1	76-7 2
	S∅	Start Card 3	6-7 0	8-9 1	10-11 2
(RL)	RC		12-3 1	14-5 2	16-7 3
	R∅		18-9 0	20-1 1	22-3 2
(D)	VDo		24-5 0	26-7 1	28-9 2
	VD		30-1 0	32-3 1	34-5 2
(N)	N		36-7 1	38-9 2	
(ON)	ÓN		40-1 0	42-3 1	44-5 2
(VN)	V́N		46-7 0	48-9 1	
(RR)	VRRV		50-1 1	52-3 2	54-5 3
	∅RR		56-7 1	58-9 2	60-1 3
(Spl)	Spl		62-3 0	64-5 1	66-7 2
(Sa)	Sa		68-9 0	70-1 1	72-3 2

GO TO SPAN. STYLE B

NAME____________________
RESP NO.____________________
TAPE NO.____________________
DATE____________________

SPANISH SPEECH STYLE 3

Subvariable			Col/Value			
(S)	SC	Card 3 (cont'd)	74-5	76-7	78-9	
			0	1	2	
	S#	Start Card 4	6-7	8-9	10-11	
			0	1	2	
(RL)	RC		12-3	14-5	16-7	18-9
			0	1	2	3
	R/L		20-1	22-3	24-5	
			0	1	3	
	R#		26-7	28-9	30-1	
			0	1	2	
(D)	VDo		32-3	34-5	36-7	
			0	1	2	
	VD		38-9	40-1	42-3	
			0	1	2	
(N)	N		44-5	46-7	48-9	
			0	1	2	
(ON)	ON		50-1	52-3	54-5	
			0	1	2	
(VN)	VN		56-7	58-9		
			0	1		
(RR)	VRRV		60-1	62-3	64-5	
			1	2	3	
	#RR		66-7	68-9	70-1	
			1	2	3	
(Spl)	SpV		72-3	74-5	76-7	
			0	1	2	
	SpC	Start Card 5	6-7	8-9	10-11	
			0	1	2	
(Sa)	SaV		12-3	14-5	16-7	
			0	1	2	
	SaC		18-9	20-1	22-3	
			0	1	2	
(Sv)	SvV		24-5	26-7	28-9	
			0	1	2	
	SvC		30-1	32-3	34-5	
			0	1	2	

GO TO SPAN. STYLE A

SPANISH SPEECH STYLE A

NAME____________________
RESP NO.____________________
TAPE NO.____________________
DATE____________________

Subvariable			Col/Value			
(S)	SC	Card 5 (cont'd)	36-7 0	38-9 1	40-1 2	
	S#		42-3 0	44-5 1	46-7 2	
(RL)	RC		48-9 0	50-1 1	52-3 2	54-5 3
	R/L		56-7 0	58-9 1	60-1 3	
	R#		62-3 0	64-5 1	66-7 2	
(D)	VDo		68-9 0	70-1 1		
	VD		72-3 0	74-5 1		
(N)	N	Start Card 6	6-7 0	8-9 1	10-1 2	
(ON)	ON		12-3 0	14-5 1	16-7 2	
(VN)	VN		18-9 0	20-1 1		
(RR)	VRRV		22-3 1	24-5 2	26-7 3	
	#RR		28-9 1	30-1 2	32-3 3	
(Spl)	SpV		34-5 0	36-7 1	38-9 2	
	SpC		40-1 0	42-3 1	44-5 2	
(Sa)	SaV		46-7 0	48-9 1	50-1 2	
	SaC		52-3 0	54-5 1	56-7 2	
(Sv)	SvV		58-9 0	60-1 1	62-3 2	
	SvC		64-5 0	66-7 1	68-9 2	

GO TO ENGL. STYLE D

NAME____________________
RESP NO.____________________
TAPE NO.____________________
DATE____________________

ENGLISH SPEECH STYLE D

Subvariable			Col/Value		
(UH)	UH	Card 6 cont'd	70-1 1	72-3 2	74-5 3
(EH)	EH	Start Card 7	6-7 1	8-9 2	10-11 3
(R)	RC		12-3 0	14-5 1	
(VN)	VN		16-7 0	18-9 1	
(NG)	NGno		20-1 0	22-3 1	24-5 2

Final C & CC simplification	Env. following: C or #	Col/Value	
(Sp)		26-7 0	28-9 1
(Sm)		30-1 0	32-3 1
(STm)		34-5 0	36-7 2
(Tp)		38-9 0	40-1 2

GO TO ENGL.STYLE C

NAME________________________
RESP NO._____________________
TAPE NO._____________________
DATE________________________

ENGLISH SPEECH STYLE C

Subvariable			Col/Value			
(UH)	UH	Card 7 cont'd	42-3 1	44-5 2	46-7 3	
(EH)	EH		48-9 1	50-1 2	52-3 3	
(OH)	OH		54-5 1	56-7 2	58-9 3	
(AY)	AYCv		60-1 1	62-3 2	64-5 3	66-7 4
	AYCh		68-9 1	70-1 2	72-3 3	74-5 4
	AY#	Start Card 8	6-7 1	8-9 2	10-11 3	12-13 4
(R)	RC		14-5 0	16-7 1		
	R#V		18-9 0	20-1 1		
	R#		22-3 0	24-5 1		
(VN)	VN		26-7 0	28-9 1		
(NG)	NGvb		30-1 0	32-3 1	34-5 2	
	NGno		36-7 0	38-9 1	40-1 2	

Final C & CC simplification	Env. following:C or #	Env. following: V	Col/Value Env. fol.:C or #			Col/Value Env. fol.: V		
(Tm)			42-3 0	44-5 1	46-7 2	48-9 0	50-1 1	52-3 2
(Tp)			54-5 0	56-7 1	58-9 2	60-1 0	62-3 1	64-5 2
(Sv)			66-7 0	68-9 1		70-1 0	72-3 1	
(Sp)	Start	Card 9	6-7 0	8-9 1		10-1 0	12-3 1	
(Sm)			14-5 0	16-7 1		18-9 0	20-1 1	
(STm)			22-3 0	24-5 2		26-7 0	28-9 2	
(STp)			30-1 0	32-3 2		34-5 0	36-7 2	
(TS)			38-9 0	40-1 1		42-3 0	44-5 1	
(TSis)			46-7 0	48-9 1		50-1 0	52-3 1	
(CC)			54-5 0	56-7 2		58-9 0	60-1 2	

GO TO ENGL. STYLE WN

ENGLISH SPEECH STYLE WN

NAME________________________
RESP NO.____________________
TAPE NO.____________________
DATE________________________

Subvariable			Col/Value			
(UH)	UH	Card 9 cont'd	62-3	64-5	66-7	
			1	2	3	
(EH)	EH		68-9	70-1	72-3	
			1	2	3	
(OH)	OH		74-5	76-7	78-9	
			1	2	3	
(AY)	AYCv	Start Card X1	6-7	8-9	10-1	12-3
			1	2	3	4
	AYCh		14-5	16-7	18-9	20-1
			1	2	3	4
	AYr		22-3	24-5	26-7	28-9
			1	2	3	4
	AY#		30-1	32-3	34-5	36-7
			1	2	3	4
(R)	RC		38-9	40-1		
			0	1		
	R#V		42-3	44-5		
			0	1		
	R#		46-7	48-9		
			0	1		
(VN)	VN		50-1	52-3		
			0	1		
(NG)	NGvb		54-5	56-7	58-9	
			0	1	2	
	NGno		60-1	62-3	64-5	
			0	1	2	

Final C & CC simplification	Env. following: C or #	Col/Value		
(Tm)		66-7	68-9	70-1
		0	1	2
(Tp)		72-3	74-5	76-7
		0	1	2
(Sv)	Start Card X2	6-7	8-9	
		0	1	
(Sp)		10-11	12-3	
		0	1	
(Sm)		14-5	16-7	
		0	1	
(STm)		18-9	20-1	
		0	2	
(STp)		22-3	24-5	
		0	2	
(TS)		26-7	28-9	
		0	1	
(TSis)		30-1	32-3	
		0	1	
(CC)		34-5	36-7	
		0	2	

GO TO ENG. STYLE B

NAME____________________
RESP NO.________________
TAPE NO.________________
DATE____________________

ENGLISH SPEECH STYLE B

Subvariable			Col/Value			
(UH)	UH	Card X2 cont'd	38-9 1	40-1 2	42-3 3	
(EH)	EH		44-5 1	46-7 2	48-9 3	
(OH)	OH		50-1 1	52-3 2	54-5 3	
(AY)	AYCv		56-7 1	58-9 2	60-1 3	62-3 4
	AYCh		64-5 1	66-7 2	68-9 3	70-1 4
	AYr		72-3 1	74-5 2	76-7 3	78-9 4
	AY#	Start Card X3	6-7 1	8-9 2	10-11 3	12-3 4
(R)	RC		14-5 0	16-7 1		
	R#V		18-9 0	20-1 1		
	R#		22-3 0	24-5 1		
(VN)	VN		26-7 0	28-9 1		
(NG)	NG vb		30-1 0	32-3 1	34-5 2	
	NG no		36-7 0	38-9 1	40-1 2	

Final C & CC simplification	Env. following: C or #	Env. following: V	Col/Value Env. fol.: C or #			Col/Value Env. fol.: V		
(Tm)			42-3 0	44-5 1	46-7 2	48-9 0	50-1 1	52-3 2
(Tp)			54-5 0	56-7 1	58-9 2	60-1 0	62-3 1	64-5 2
(Sv)			66-7 0	68-9 1		70-1 0	72-3 1	
(Sp)	Start Card X4		6-7 0	8-9 1		10-1 0	12-3 1	
(Sm)			14-5 0	16-7 1		18-9 0	20-1 1	
(STm)			22-3 0	24-5 2		26-7 0	28-9 2	
(STp)			30-1 0	32-3 2		34-5 0	36-7 2	
(TS)			38-9 0	40-1 1		42-3 0	44-5 1	
(TSis)			46-7 0	48-9 1		50-1 0	52-3 1	
(CC)			54-5 0	56-7 2		58-9 0	60-1 2	

GO TO ENG. STYLE A

ENGLISH SPEECH STYLE A

NAME________________
RESP NO.______________
TAPE NO.______________
DATE________________

Subvariable			Col/Value			
(UH)	UH	Card X4	62-3 1	64-5 2	66-7 3	
(EH)	EH		68-9 1	70-1 2	72-3 3	
(OH)	OH		74-5 1	76-7 2	78-9 3	
(AY)	AYCv	Start Card X5	6-7 1	8-9 2	10-11 3	12-3 4
	AYCh		14-5 1	16-7 2	18-9 3	20-1 4
	AYr		22-3 1	24-5 2	26-7 3	28-9 4
	AY#		30-1 1	32-3 2	34-5 3	36-7 4
(R)	RC	Start Card X6	6-7 0	8-9 1		
	R#C		10-11 0	12-3 1		
	R#		14-5 0	16-7 1		
(VN)	VN		18-9 0	20-1 1		
(NG)	NGvb		22-3 0	24-5 1	26-7 2	
	NGno		28-9 0	30-1 1	32-3 2	

Final C & CC simplification	Env. following: C or #	Env. following: V	Col/Value Env. fol.: C or #	Col/Value Env. fol.: V
(Tm)			34-5 36-7 38-9 0 1 2	40-1 42-3 44-5 0 1 2
(Tp)			46-7 48-9 50-1 0 1 2	52-3 54-5 56-7 0 1 2
(Sv)			58-9 60-1 0 1	62-3 64-5 0 1
(Sp)			66-7 68-9 0 1	70-1 72-3 0 1
(Sm)	Start Card X7		6-7 8-9 0 1	10-1 12-3 0 1
(STm)			14-5 16-7 0 2	18-9 20-1 0 2
(STp)			22-3 24-5 0 2	26-7 28-9 0 2
(TS)			30-1 32-3 0 1	34-5 36-7 0 1
(TSis)			38-9 40-1 0 1	42-3 44-5 0 1
(CC)			46-7 48-9 0 2	50-1 52-3 0 2

Chapter
V-2

THE MULTIPLE PREDICTION OF PHONOLOGICAL VARIABLES IN A BILINGUAL SPEECH COMMUNITY[1]

Joshua A. Fishman
and
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Thus far the sociolinguistic description of phonological variables has been limited to the speech of monolinguals substantively and to the level of simple cross-tabulation methodologically (Labov 1964, 1966, 1968). The present report attempts to go beyond both of these restrictions. It deals with selected phonological variables in the speech of Spanish-English bilinguals in the Greater New York City Area and it attempts to relate the occurrence or non-occurrence of particular variants of these variables to a larger set of sociolinguistic and demographic factors.

DATA COLLECTION

The data analyzed for the purposes of this report was obtained as part of an interdisciplinary project on the measurement and description of widespread and relatively stable bilingualism in a Puerto Rican neighborhood in the Greater New York City Area (Fishman, Cooper, Ma, _et al_. 1968). The neighborhood studied by a team of linguists, psychologists and sociologists included 431 Puerto Ricans (or individuals of Puerto Rican parentage) living in 90 households. All of these individuals were covered in a language census which obtained the demographic data utilized for the purposes of this report (at the same time that it obtained detailed self-reports on bilingual usage and ability). The linguistic data utilized for this report was obtained in the course of 2 to 4 hour psycholinguistic interviews and testing sessions with a random stratified sample of those Puerto Ricans living in the study neighborhood who were over the age of 12.

Speech Contexts

The psycholinguistic interviews and testing sessions were designed to elicit speech data in five different contexts which form a continuum from most formal or careful to most informal or casual as follows:

Context D: Word Reading. Subjects were asked to read two different lists of separate words, one in English and one in Spanish. The speech data obtained in this fashion was considered to be representative of the most careful pronunciation available to the subjects.

Context C: Paragraph Reading. Subjects were asked to read four different paragraphs, two in English and two in Spanish. The speech data obtained in this fashion was considered to be representative of (somewhat less) careful pronunciation.

Context WN: Word Naming. Subjects were asked to "name as many words as come to mind that have to do with (domain)." This task was performed separately in English and in Spanish for each of the following domains: home, neighborhood, school, work, church. The speech data obtained in this fashion was considered to be representative of intermediate pronunciation (neither markedly careful nor casual).

Context B: Careful Conversation. Subjects were asked factual questions concerning five taped "playlets" to which they had just listened. Ideally, half of the questions were asked (and answered) in Spanish and half were asked and answered in English. The speech data obtained in this fashion was considered to be representative of somewhat (but not completely) casual pronunciation.

Context A: Casual Conversation. Subjects were asked their personal opinions and preferences with respect to the problems that figured in the playlets to which they had just listened. The speech data obtained in this fashion was considered to be representative of the most informal pronunciation that could be elicited by an interviewer.

Only the last three contexts (WN, B, A) will be examined in the discussion that follows in view of the restricted corpuses obtained in the reading contexts in the study population.

LINGUISTIC VARIABLES

The taped speech samples obtained for the above mentioned 5 contexts were independently scored by two linguists on 7 Spanish and 18 English variables. The reliability of scoring varied only slightly and irregularly from context to context and from one language to the other, the reliability coefficients obtained ranging from .73 to .94 with a median of .90. A full report on the contextual variation encountered for each variable, as well as on the factorial relationship between all variables, is available elsewhere (Ma and Herasimchuk 1968). The present report deals only with selected values on one Spanish and one English variable in order to illustrate a method of analysis hitherto not utilized in sociolinguistic research. The particular linguistic values selected for presentation in this study are further explained in the section on Results, below.

DEMOGRAPHIC VARIABLES

Four demographic factors (sex, age, education and birthplace) are included in the analyses presented in this report. Social class, a variable frequently utilized in other sociolinguistic research on phonological variables, was not utilized in the present research due to the severe restriction in range that our overwhelmingly lower class Puerto Rican subjects revealed in this connection. An extensive analysis of the demographic variation encountered in our study neighborhood is available elsewhere (Fishman 1968). The reliability coefficients for the various items of obtained demographic information are all .90 or higher.

Sex has consistently proved to be a non-significant demographic variable in accounting for phonological variation in Puerto Rican Spanish. It was included in the present study merely in order to provide a comparison with prior studies.

Age was categorized in two separate ways. As a three-category variable the categories employed were: <25, 25-34, >34. As a two-category variable categories utilized were: <25 and 25 and over. By categorizing age in two different ways we will be able to tell whether one categorization is more related to linguistic variation than the other and, at the same time, summate both age categorizations into one age variable.

Education was categorized in three different ways. As a four-category variable the categories employed were: <7 years, all in Puerto Rico; 7 or more years, all in Puerto Rico; partially in Puerto Rico and partially in continental USA; all in continental USA. As a two-category variable education was categorized in two different ways:

first, all in Puerto Rico vs. all or part in continental USA, and, second, all USA vs. all or part in Puerto Rico. Once again, our analytic technique will enable us to summate these three different ways of categorizing education as well as to tell whether there is any difference between them in explaining linguistic variation.

Birthplace was categorized in two different ways. As a four-category variable the categories used were: Highland Puerto Rico, Coastal Puerto Rico other than San Juan and suburbs, San Juan and suburbs, and continental USA. As a two-category variable the categories utilized were Highland Puerto Rico vs. all other birthplaces. As in the other two instances of multiple categorization of demographic variables we will be able both to compare the effectiveness of these two categorizations of birthplace in explaining linguistic variation as well as to summate them into one birthplace variable.

STATISTICAL ANALYSIS

The statistical technique utilized in this report is that of analysis of variance via multiple regression analysis. Analysis of variance is a technique designed to answer questions concerning the separate significance as well as the interactional significance of several simultaneous effects. In the context of the present study analyses of variance can tell us whether context, age, education or birthplace are each separately significant in explaining variation in the production of a particular linguistic variant or whether the interaction between any two of them, e.g., between context and birthplace, has explanatory significance. Multiple regression analysis is a technique designed to answer questions concerning the value of utilizing additional explanatory parameters beyond those already utilized at any given stage in the explanatory process (Bottenberg and Ward 1963, Cohen 1965, 1968, in press). In the context of the present study multiple regression analysis can tell us whether or not certain explanatory parameters (e.g., context plus age) are already so powerful in explaining variation in the production of a particular linguistic variant that it is not necessary or productive to add other explanatory parameters even if the latter too are significantly related per se to the variation in question.

HYPOTHESES

Spanish variables

Our general hypothesis regarding linguistic variation in Puerto Rican Spanish (PRS) in the speech community under study is that it will consist of contextual variation primarily and demographic variation only secondarily. Except for regionally related differences between speakers of highland origin and speakers of coastal origin we consider our subjects as constituting a single speech community. Our Ss have all learned the norms of Spanish communicative competence pretty much in the same way and at the same developmental period of their lives. These norms incorporate contextual variation. Too few of our Ss have had too little exposure to formal, educated Spanish to constitute an educated network of the speech community. Such a network might develop speech norms of its own that could significantly modify (i.e., raise or lower) the contextual variation norms that exist for the speech community as a whole.

Our general hypothesis is that except for a highland-coastal difference on a few variables no other significant demographic factors will be encountered in explaining any linguistic variation that may exist in Puerto Rican Spanish above and beyond contextual variation.

This hypothesis will be tested here against one illustrative Spanish variant where a variant is described as one of the realizations that a variable can assume.

English variables

With respect to linguistic variation in Puerto Rican English in the speech community under study our general hypothesis is that it will consist of demographic variation primarily and contextual variation secondarily (if at all). We do not view our subjects as constituting a unitary English speech community with its own contextual norms of communicative competence in that language. In general the English speaking horizons and experiences of most of our subjects are still too limited for contextual varieties of English to have developed (or to have been adopted) and to have been stabilized. On the other hand there are within the speech community those whose English has been significantly modified by substantial influences stemming from outside of the community such as those that derive from American education in particular and increased time in the continental United States in general. We would expect their English to differ from those with other demographic characteristics who have not had these experiences. We expect these differences between demographic groups to be pervasive in their use of English rather than contextualized along a casualness-carefulness dimension for intra-group purposes. This hypothesis will be tested here against one illustrative English variant.

RESULTS

Spanish Variant SpC-0. SpC-0 refers to the dropping of the plural marker s where the following word begins with a consonant. An example of this realization would be (los) muchacho comen, as opposed to the standard realization (los) muchachos comen (SpC-1) or the common PRS variation (los) muchachoh comen (SpC-2). This variable (SpC) had a very high number of occurrences and the realization in question showed considerable contextual variation, accounting for just 17% of the cases in most formal context but 62% in the least formal context (Ma and Herasimchuk 1968). S in this morphophonemic environment was realized quite differently from s in other environments. For instance, s before a consonant within a word showed zero realization only 11% of the time in the least formal context. Similarly, s marking a plural article preceding a word beginning with a consonant was realized as zero only 23% of the time. In these environments S-2 or [h] was the preferred realization 81% and 70% of all times respectively in style A. Thus SpC is definitely a favorable environment for zero realization of s, with the further advantage, for our present purposes, that there was substantial variation in the realization of s-0 accross contexts. Under these circumstances, then, we decided to ask whether other parameters of a directly demographic nature might also be significantly related to differential production of SpC-0.

If we examine the first column in Table 1 (that column is labeled r) we will note that only Context, in each of its aspects, correlates significantly with differential use of SpC-0. The second aspect of Context (that which differentiates between Word Naming, on the one hand, and B + A, on the other hand) correlates with SpC-0 almost as well (.423) as do both aspects taken together (column 3, R = .424).

TABLE 1. ANALYSIS OF VARIANCE VIA MULTIPLE REGRESSION ANALYSIS OF PUERTO RICAN SPANISH SpC-0 (n=34)

SOURCE	(1) r	(2) r^2	(3) R	(4) R^2	(5) Cum R	(6) Cum R^2	(7) ΔR^2	(8) F_{r^2}	(9) F_{R^2}	(10) $F_{\Delta R^2}$
1. Context: WN vs. B vs. A	.380*	.144						5.4*		
2. Context: WN vs. all other	-.423*	.180	.424	.180	.424	.180		7.0*	3.0	
3. Sex	-.240	.058	.240	.058	.494	.244	.064	2.0	2.0	2.5
4. Age: < 25 vs. 25-34 vs. > 34	-.055	.003						< 1		
5. Age: < 25 vs. all other	-.021	.000	.156	.024	.509	.259	.015	< 1	< 1	< 1
6. Educ: < 7 yrs. PR vs. 7+ yrs. PR vs. PR and US vs. US only	-.116	.013						< 1		
7. Educ: all PR vs. other	.111	.012						< 1		
8. Educ: all USA vs. other	-.022	.001	.193	.037	.535	.286	.037	< 1	< 1	< 1
9. Birthplace: Highland vs. Coastal vs. San Juan vs. USA	.063	.004						< 1		
10. Birthplace: Highland vs. all other	-.163	.027	.216	.047	.585	.342	.056	< 1	< 1	< 1
11. Context x Birthplace	.239	.057	.239		.602	.362	.020	2.0	2.0	< 1

* = Significant at .05 level

The fact that only the two aspects of Context correlate significantly with SpC-0 is corroborated in column 8 where only the two aspects of context yield significant F ratios. Thus we can safely conclude that in the speech community under study demographic differences per se are not significantly related to differential use of SpC-0 whereas Contextual differences per se are so related. However, if we are to stop our prediction of SpC-0 with context alone we will have accounted for only 18.0% of the causal variance (see column 6). If we add sex of speaker to the prediction of SpC-0 we can account for 24.4% of the causal variance. This increase is due to the fact that there is a slight tendency (column 1: r = -.240) for males to use SpC-0 more frequently than females.

If we continue to add successive demographic variables our multiple prediction of SpC-0 continues to rise (see column 5) and finally reaches the appreciable figure of .602. A multiple correlation of this magnitude accounts for 36.2% of the causal variance in SpC-0, a substantial increase beyond that accounted for by context alone.

Although none of the demographic variables per se is significantly related to differential use of SpC-0 sex of speaker approaches such significance. This fact, however, is due to the fact that in the speech community under study more women than men are of Highland origin in Puerto Rico. The Context by Birthplace interaction therefore also approaches significance, indicating that some birthplace groups show more contextual variation than do others.

Subsidiary Table 1a reveals the mean number of occurrences of SpC-0 in the three different contexts for our sample as a whole and for two different birthplace subsamples. This table confirms that the effective contextual difference comes between WN and the two conversational styles. Table 1a also confirms the greater contextual sensitivity of Highland born Ss for whom we find greater average contextual differences than those found for other Ss.

TABLE 1a. CONTEXTUAL DIFFERENCES IN
MEAN NUMBER OF OCCURRENCES OF SpC-0,
FOR TOTAL SAMPLE AND FOR BIRTHPLACE GROUPS

Birthplace Groups	Contexts WN	B	A	Total
Highland	27.13	57.27	66.58	49.17
Other	30.38	57.05	53.29	59.06
Total	29.13	57.14	58.79	54.39

English Variant EH-2

EH-2 represents the Standard American English sound [æ] , as in cat, bad, ham. Two other variants of this EH variable were recognized: EH-1, as in New York City [kɛᵊnt, bɛᵊd, hɛᵊm] ; and EH-3, as in accented English cahn't, bahd, hahm. EH-2 serves fairly effectively to differentiate accented from native English speakers, as the sound is not available in Spanish phonology. Mastery of this phone seems to imply mastery of a number of other typically English sounds not available in Spanish.

Use of the three variants of EH changed but slightly and irregularly with context (Ma and Herasimchuk 1968), supporting the hypothesis of more or less fixed usage of one sound by any given speaker. EH-2 showed an overall higher incidence of occurrence and, for this reason, was chosen over EH-1 for testing. It is also less ambiguously American, as EH-1 can be approximated by the Spanish [ɛ] or [e], so that a score of EH-1 does not clearly isolate the sound as English, rather, it marks some form or other of dialect realization. For reasons both of numerical frequency and of phonoloigcal exclusiveness then, EH-2 is a very good variant for the statistical testing of relationships between differential use of sounds and the characteristics of their users.

Table 2 reveals quite a different picture from that previously shown in Table 1. The values in column 1 indicate that neither of the two aspects of Context are significantly related to differential use of EH-2. Indeed, even when both aspects of Context are taken together Context is still the least important multiple predictor of EH-2, except for Sex of Speaker (column 4). If we utilize Context alone we are able to account for only 3.6% of the causal variance pertaining to differential use of EH-2 (column 6). If we add Sex of Speaker to Context our prediction rises only to 5.8%. However, as soon as we consider such demographic variables as Age, Education, and Birthplace, the picture changes radically.

Of the three major demographic variables related to differential use of EH-2 the most important per se is clearly Education (column 1). If we combine all three aspects of Education we obtain a multiple correlation of .753 (column 3) which itself accounts for 56.7% of the causal variance (column 4).

TABLE 2. ANALYSIS OF VARIANCE VIA MULTIPLE REGRESSION ANALYSIS OF PUERTO RICAN ENGLISH EH-2 (n=26)

SOURCE	(1) r	(2) r^2	(3) R	(4) R^2	(5) Cum R	(6) Cum R^2	(7) ΔR^2	(8) F_{r^2}	(9) F_{R^2}	(10) $F_{\Delta R^2}$
1. Context: WN vs. B vs. A	.174	.030						< 1		
2. Context: WN vs. all other	-.112	.013	.189	.036	.189	.036		< 1		
3. Sex	-.136	.018	.136		.241	.058	.022	< 1	< 1	< 1
4. Age: < 25 vs. 25-34 vs. > 34	-.524	.275						9.1**		
5. Age: < 25 vs. all other	.555	.308	.556	.309	.582	.338	.280	10.7**	5.17*	4.2*
6. Educ: < 7 yrs. PR vs. 7+ yrs. PR vs. PR and US vs. US only	.717	.514						25.2**		
7. Educ: all PR vs. other	-.722	.521						26.1**		
8. Educ: all USA vs. other	-.589	.347	.753	.567	.785	.616	.278	12.8**	9.45**	4.1*
9. Birthplace: Highland vs. Coastal vs. San Juan vs. USA	.446	.199						6.0*		
10. Birthplace: Highland vs. all other	-.309	.095	.491	.241	.810	.656	.040	2.5	3.67	< 1
11. Context x Birthplace	.428	.183	.428	.183	.815	.664	.008	5.4*	5.4*	< 1

* = Significant at .05 level
** = Significant at .01 level

TABLE 2a. CONTEXTUAL DIFFERENCES IN MEAN NUMBER OF OCCURRENCES OF EH-2 FOR TOTAL SAMPLE AND FOR EDUCATIONAL GROUPS

Educational Groups	Contexts WN	B	A	Total
Educated entirely in Puerto Rico	15.75	16.43	19.40	16.46
Educated partially or entirely in USA	60.71	64.43	65.17	63.35
Total	35.79	38.57	51.71	40.20

Those of our Ss who were partly or entirely educated in the United States are more likely to utilize EH-2 than those entirely educated in Puerto Rico (note minus correlations in column 1). This relationship between differential use of EH-2 and education is further clarified in subsidiary Table 2a which reveals it to be consistent for each speech context.

If Education is now combined with the variables that precede it in Table 2 (Context, Sex of Speaker and Age) then the resulting cumulative multiple correlation with EH-2 rises to .785 (column 5) and we have accounted for 61.6% of the causal variance in differential use of EH-2 (column 6).

Although neither Age nor Birthplace are as strongly related to EH-2 as is Education, their independent correlations with EH-2 are clearly significant (columns 1 and 8). When all three of them are added to Context and Sex of Speaker we arrive at a cumulative correlation of .810 (column 5) which indicates that we have accounted for

65.6% of the causal variance in differential use of EH-2 (column 6).

While Context itself is not significantly related to differential use of EH-2 the interaction between Context and Birthplace is significantly related to such use. This implies that certain birthplace groups show more contextual variation than do others. Whereas our sample as a whole increasingly uses EH-2 as it proceeds from WN (35.79) to B (38.57) to A (51.71) this variation occurs primarily between B and A for our Highland born subjects and between WN and B for other subjects, with the latter using EH-2 more frequently in all contexts.

Incremental Prediction of EH-2

Not only are Age and Education significant variables per se in accounting for differential use of EH-2 but they are also incrementally significant in this respect. Column 10 of Table 2 reveals that it pays to add Age as a predictor of differential use of EH-2 when one has previously used only Context and Sex of Speaker in this connection. Another way of saying this is that .338 (column 6), the cumulative prediction of EH-2 based on three variables (Context, Sex of Speaker and Age) is significantly better than the cumulative prediction based on only the first two of these three (.058). Similarly, Table 2 indicates that it pays to add Education as well to our prediction of differential use of EH-2, even after Context, Sex of Speaker and Age have been used cumulatively in this connection. The cumulative prediction of EH-2 based upon these four variables (.616) is significantly greater than that based only on the first three of these four (.338).

The same can not be said, however, with respect to Birthplace or the interaction between Birthplace and Context. While it is true that their cumulative addition to the prediction of differential use of EH-2 (after Context, Sex of Speaker, Age and Education have been cumulatively utilized for this purpose) does increase the multiple prediction of EH-2 from .616 to .656 to .664, these increases, though welcome, are not statistically significant. Thus, if Birthplace were an expensive or difficult measure to obtain we would be justified in deciding to forego it since it does not produce a significant increment in our efforts to account for differential use of EH-2.

Using one Linguistic Value to Predict Another

While the attained cumulative prediction of differential use of EH-2, primarily the basis of demographic variables, is high indeed, the question inevitably arises whether it can be further improved. Although there may be some possibility of doing so on the basis of additional demographic variables it would seem to be far wiser to turn in some other direction in order to find more unique variance. Additional demographic variables would inevitably be highly correlated with the ones already utilized. As a result they could hardly get at any different or really new components of the differential use of EH-2. Since only relatively little of the differential use of EH-2 remains unexplained at this point we are crucially in need of a predictor that is maximally unrelated to the prior predictors but, at the same time, also maximally related to EH-2. Another linguistic value might possess exactly these characteristics. Let us, therefore, examine the utility of UH-3 in furthering the cumulative prediction of EH-2.

English Variant UH-3

UH-3 represents the sound most used by Spanish speakers unable to make the medial English [ʌ]. Use of UH-3, then, is saying cot for cut, com for come, with the vowel being somewhat higher and more tense than in the actual examples given. Phonetically the sound is represented as [ɔ,ɔ˔ , orʌ̝] . The other accented variant for UH, [a] as cahm for come, did not prove to be as productive in the speech community under study. As in the case of EH-2, UH-2 or [ʌ], the standard sound, is not available to a speaker whose phonology is mainly Spanish. On the other hand, a speaker who is able to produce UH-2 with any facility almost never resorts to the interference variant UH-3; or at least such was the case with the data collecting techniques used in our study in which no interviewer used accented English speech. If a speaker could say [æ]we believed he could also say [ʌ]. Therefore the American variant for one variable was tested against the interference variant for another in the belief that a strong negative relationship was likely to obtain between them. If we were correct in our belief then differential non-use of the one could be used to predict differential use of the other and vice versa.

Place Table 2b about here

As subsidiary Table 2b reveals we were quite right in turning to the use of UH-3 in our effort to further improve the cumulative

TABLE 2b. ADDING ANOTHER LINGUISTIC VARIABLE IN THE ANALYSIS OF VARIANCE VIA MULTIPLE REGRESSION ANALYSIS OF ENGLISH EH-2 (n=26)

SOURCE	(1) r	(2) r^2	(3) R	(4) R^2	(5) Cum R	(6) Cum R^2	(7) ΔR^2	(8) F_{r^2}	(9) F_{R^2}	(10) $F_{\Delta R^2}$
12. UH-3 (frequency of use)	-.703**	.494	.703	.494	.891	.794	.130	23.52**	23.52**	8.13*

**significant at the .01 level
* significant at the .05 level

prediction of differential use of EH-2. The correlation between these two (column 1) is substantial enough for EH-2 to be a significant predictor of UH-3 in and of itself (columns 1 and 8). However, in addition, UH-3 is also an incrementally significant predictor of EH-2. Even when it is added after 11 prior predictors have been cumulated it raises the multiple prediction of EH-2 by a significant amount (column 10), from .815 (column 5, line 11, Table 2) to .890 (column 5, Table 2b). With the addition of UH-3 we have accounted for 79.4% of the causal variance in the differential use of EH-2! This constitutes a magnitude of explained variance rarely attained in the social science literature.

SUMMARY AND CONCLUSIONS

An analytic method has been illustrated which has not hitherto been applied in sociolinguistic description and prediction. This method, the analysis of variance via regression analysis, permits the investigator to go far beyond the interaction between linguistic context and a single demographic variable (the level of prior sociolinguistic description and prediction of phonological behavior). Not only can a large and varied array of additional predictor variables be utilized, sociological, psychological or linguistic, but each such additional predictor can be assessed with respect to its own contribution as well as with respect to its incremental contribution to the overall prediction of differential use of any phonological value.

In the illustrative material selected for presentation in this report, differential use of a value in Puerto Rican Spanish (SpC-0) was predicted best, as hypothesized, on the basis of speech context. However, the addition of several demographic variables plus the interaction between a particular demographic variable and speech Context, significantly boosted our ability to account for causal variance in the differential use of SpC-0. Our final cumulative prediction was R = .602 which is equivalent to 36.2% of the causal variance that needs to be explained.

Our efforts to explain and predict differential use of a value in Puerto Rican English (EH-2) benefited most (as hypothesized) from the separate and from the cumulative use of several demographic variables. However, after such variables had been utilized to the point where their incremental contributions were no longer significant the addition of another linguistic variable (UH-3) raised our final cumulative prediction of EH-2 to R = .890 which is equivalent to 79.4% of the causal variance that needs to be explained.

The major reason why we were so much more successful in predicting EH-2 than SpC-0 was due to the fact that our bilingual subjects represented a single speech community--with rather little variation from one person to the next--insofar as their use of Spanish was concerned. Interpersonal variation was much greater in conjunction with the community's use of English, however. Contacts with English language institutions such as the school, the work sphere and other out-of-neighborhood speech networks varied greatly in the speech community under study. The prediction of differential use of English linguistic values was markedly improved by the use of demographic variables that were probably related to differential contacts with such English speech networks.

We were so much more successful in predicting EH-2 than SpC-0 because the speech community studied exhibited greater homogeneity of usage on Spanish variables than on English ones. Apart from the range provided by differing regional styles and repertoire ranges in Spanish, none of the variables used represented a cut-off point separating two sets of speech networks or of phonological repertoires. In other words, everyone in the community mastered basic Spanish phonology, even though some respondents could barely converse in Spanish. On the other hand, English proficiency was more varied, so that some respondents spoke English fluently while others spoke almost no English, with the range of ability between these extremes corresponding to a graduated mastery of English phonology. Thus a phonological cut-off point could be established to determine English fluency, whereas fluency per se in Spanish could not be determined solely by phonological markers.

For similar reasons the use of a given English sound could be used to predict the use or non-use of a given interference sound. For Spanish we could primarily make intra-personal predictions because, overall, most speakers tended to vary contextually in producing certain sounds. For English, we were primarily able to make inter-personal predictions because those who were able to make certain sounds belonging to English phonology never or rarely used the interference alternatives in use by others in the community.

NOTES

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Chapter
V-3

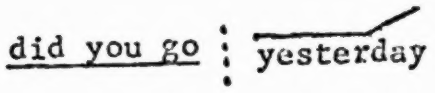
A METHOD FOR RECORDING AND ANALYZING THE PROSODIC FEATURES OF LANGUAGE[1]

Stuart H. Silverman[2]

One purpose of the work reported in this paper was the development and assessment of a method for transcribing and analyzing such paralinguistic features of speech as stress, juncture and intonation. The rationale for the study comes as a result of the ideas of Halliday (1968), Bolinger (1958), Pierce (1966), and many other linguists. These workers have argued strongly that intonation (pitch), juncture (pause) and stress (emphasis) are of prime importance in the communicative process. These features of speech are generally referred to as "prosodics."[3]

Stress is employed for the purpose of indicating the importance of certain words and/or syllables and for indicating that a particular part of the utterance contains new information (in terms of the speaker's intent). Juncture is used by the speaker to divide and organize the message into what he feels are "meaningful units." The functions of intonation are somewhat less clear than those of juncture and stress although pitch usually works in conjunction with stress. More often than not, a stressed syllable is accompanied by a rise in pitch. Intonation seems to be employed by the speaker in the expression of mood, and in part, to distinguish certain types of sentences (for example, interrogative) from others (like declaratives).

A new system for recording and analyzing the prosodic features of verbal communication was needed because of serious lacks in the two most commonly used systems which were available. The first of these methods attempts to draw an intonation contour for each utterance under examination (Smalley 1966). Thus, for example, the sentence: "did you go yesterday?" might be represented as:



indicating that the first three syllables have a low, unchanging pitch level. The first two syllables of "yesterday" are higher in pitch (yet constant). The final syllable rises in pitch still further. This notation system is not subject to quantification except in a very gross manner. In other words, two identical utterences, coded in this manner, could be superimposed on one another so that gross differences could be examined.

The second system attempts to chart relative pitch levels (Koutsoudas 1966). It utilizes the numerals "one" (1) through "four" (4). It assumes that all speakers have four basic pitch levels (with "one" representing the lowest and "four" representing the highest). Under this schema, the sentence: "when are you going home?" might be analyzed as:

^{2}when are you ^{3}going home^{1}

indicating that the query begins on a "medium" pitch level and continues on that level for three syllables. The fourth and fifth syllables are slightly higher. The last syllable falls sharply. This method is unsatisfactory for analyzing the free conversation of speakers in that its measures are too gross. That is, they can only account for "major" intonation changes. It is also unsatisfactory because it assumes that any given speaker has only four pitch levels. Finally, both methods allow comparisons between relative, but not absolute intonation contours.

One application of a more refined method of prosodic recording would be in helping to analyze the systematic variation in linguistic form that accompanies contextual and demographic variation. Sociolinguistic research clearly indicates that when a person is talking, the grammatical structure of his speech, as well as the phonological and lexical structures, may shift to a great degree as a result of changes in the topic being discussed, the place where the discussion is being held and the people participating in the conversation (Fishman 1968; Labov 1966). An example of this "code switching" might be the contrast in speech between a youngster talking to his friends in the playground and the same youngster conversing with his teacher in the classroom. No evidence, however, has been gathered to show whether there is a shift in prosodics which accompanies lexical, grammatical and phonological shifts in code (or variety) switching. The second major purpose of the present research, then, was to see if this paralinguistic shift can be found to coincide with shifts in code.

Procedure

Tapes of the speech of three native speakers of Puerto Rican Spanish were selected to serve as the sample upon which the method, described below, was applied. The tapes were chosen, on the basis of independent linguistic analyses, to represent three maximally different types of speaker. The basis of the selection was not made known to the prosodic recorder until after the method had been applied. For each of the speakers selected, there were two minutes of tape recording. The entire six minutes were in Spanish. Each subject's tapes contained one minute of paragraph reading (the same paragraph for each speaker) and one minute of free conversation. These two contexts were chosen as being maximally different in terms of formality (with paragraph reading designated as "formal" and free conversation designated as "informal"). It had been demonstrated that the formal-informal dichotomy was associated with systematic phonological variation in Puerto Rican Spanish (Ma and Herasimchuk 1968).

The system used was the conventional musical notation system with several modifications. First, the "bar" (or measure) was not defined in terms of number of beats. It was determined that any given measure would refer to all those notes which fell between any notation indicating a rest (or pause) and the first rest notation which either follows or precedes it. Justification for this may be found in Halliday's (1968) notion that the analysis of conversation should be in terms of "intonation units" (those verbalizations which occur between pauses). He argues that in orthography the message is divided into meaningful segments via the sentence, while in verbal communication the speaker uses pauses to signal the end of a message or thought and the beginning of the next thought or message. Each stretch of speech was also divided into ten-second intervals. Thus it became possible to compare the usefulness of time and intonation as sampling units. Stress was indicated by the use of accent marks (/) above each stressed syllable. Since this is a first effort at using a musical notation system for recording prosodics, steps were taken to somewhat simplify the process. Notes were recorded in terms of eighth and quarter notes. Rests were noted in terms of quarter, half and full notes. It was recognized that some degree of preciseness was lost due to the above self-imposed limitations.

Each tape was listened to several times so that a starting note could be chosen. One of the tapes began with a medium tone (as compared with the other five tapes) and this tone was arbitrarily assigned the value "middle c". From that point on, each beat (syllable) was assigned a note value and length value relative to the preceding note. A piano was used to accurately judge the pitch distance between beats. In other words, the "tune" on the tape was converted into piano music. The length values of rests were timed on a stopwatch.

Seven analyses of variance were performed on the data. The first one was done to determine whether there were significant differences in the number of intonation units observed between the three speakers and two contexts. Also to be determined here was whether any speaker or context had more of a different length of rest than any other speaker or context. For example, did the formal context contain more longer (whole) rests and less shorter (one quarter) ones than the informal context? The second and third analyses were performed to test for the significance of differences in the number of eighth and quarter notes between the three speakers and two contexts. The first of these was done on the basis of intonation units and the second was done on the basis of the ten-second time units. Another purpose of the two analyses was to gain some idea of the speed of talking. It was assumed here, for example, that if the formal context contained fewer quarter notes and more eighth notes than the informal context, that the former could be said to be slower than the latter. The fourth and fifth analyses were to determine whether there were differences in the number of stresses between speakers and contexts (again, by time and intonation units). Finally the range of notes was divided into seven categories, each containing two notes. The note categories were: 1) low F, G; 2) A, B below middle C; 3) C, D below middle C; 4) E, F below middle C; 5) G, below middle C and middle A; 6) middle B, C; 7) middle D, E. The last two analyses sought to determine whether there were differences between the speakers and contexts in terms of the seven categories (for both time units and intonation units).

Results

All seven analyses of variance are summarized in Table 1. They indicate that the method of prosodic notation employed was precise enough to distinguish between different speakers, different contexts, and different categories within the criterion measures used. For example, the first analysis indicates that significantly more of one length of rest was produced than another. It also indicates that the number of different lengths produced varied significantly as a function of context. That is, there were more of one type of rest in one context (e.g., full rests in the formal context) than in the other. In addition, it indicates that although the three speakers did not differ significantly with respect to the total number of pauses made, they did differ significantly with respect to the number of certain types of rest produced. That is, one speaker produced significantly more of a given length of rest than did another speaker.

For each of the significant effects found in the seven analyses, a Newman-Keuls test was performed so that the significance of differences between pairs of speakers, contexts, types of criterion measures, and between the interactions of these variables, could be determined. For example, in the Newman-Keuls test of the significance of differences between the average number of types of rests (per time unit) as observed for the three speakers, a significant difference was seen between the average number of quarter rests given by the third speaker in the formal and informal contexts. Of the differences between 62 pairs of means in this particular analysis, about 30% were significant. After all Newman-Keuls tests had been performed, it was found that 60% of all possible differences were significant.

While there appeared to be no objective advantage in using intonation units rather than time units many investigators may continue to prefer the former for the study of prosodics in view of the fact that such units stand closer to the natural organization of speech.

Conclusions

The present study reveals significant differences between the prosodic structures of the speech of three independently selected speakers, each speaking in two different contexts. The results obtained suggest that with some degree of refinement and modification, the recording and analysis of prosodics through a musical notation system appears to be both practical and valuable. The practicality of this method lies in the fact that anyone with a working knowledge of some musical instrument and/or some training in the theory of music can rapidly be trained to record pitch, pause and stress. Its value lies in the increased precision it makes possible in the description of prosodics in comparison to previously recommended methods. The results certainly suggest that the method is useful in describing the prosodic variation accompanying other sociolinguistic variation, inasmuch as the method was able to distinguish not only between linguistically diverse speakers (as independently determined) but also between two different contexts. Finally, the results also suggest that prosodic variation, like phonological variation, is in part a function of the contexts in which speech is produced.

Footnotes

[1] The research reported in this paper was supported by a grant from the U.S. Office of Education, Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was supported by a grant to the Project Director by the College Entrance Examination Board.

[2] The authors are grateful for the assistance of Mr. Parrish Merriwether.

[3] In addition to the linguists already cited, the interested reader is referred to writings by Bolinger (1955, 1957), Danes (1960), Gunter (1966) and Stockwell (1966).

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Table 1

ANALYSES OF VARIANCE FOR SEVEN CRITERION SCORES

Source	df	ms	F
	Rests by time units		
Between Subjects	16		
Group (C)	2	.57	.90
Error (b)	14	.63	
Within Subjects	85		
Context (A)	1	.80	.27
Rest type (B)	2	8.30	16.60**
AB	2	9.79	18.47**
AC	2	.12	.04
BC	4	1.75	35.00**
ABC	4	4.19	7.95**
Error (w)	70		
Error_1 (w)	14	2.92	
Error_2 (w)	28	.05	
Error_3 (w)	28	.53	
Total	101		
	Notes by time units		
Between Subjects	53		
Group (C)	2	131.47	7.62**
Error (b)	51	17.26	
Within Subjects	270		
Context (A)	1	179.67	4.43**
Note type (B)	2	438.02	137.31**

**$p < .01$

Table 1 continued

Source	df	ms	F
Notes by time units (continued)			
AB	2	88.03	326.03**
AC	2	11.12	.27
BC	4	62.32	19.54**
ABC	4	20.53	76.04**
Error (w)	255		
$Error_1$ (w)	51	40.56	
$Error_2$ (w)	102	3.19	
$Error_3$ (w)	102	.27	
Total	324		
Notes by intonation units			
Between Subjects	16		
Group (C)	2	145.69	6.94**
Error (b)	14	20.99	
Within Subjects	85		
Context (A)	1	89.47	13.37**
Rest type (B)	2	1341.83	30.20**
AB	2	168.29	58.84**
AC	2	315.91	47.22**
BC	4	1.47	.03
ABC	4	5.74	2.01
Error (w)	70		
$Error_1$ (w)	14	6.69	
$Error_2$ (w)	28	44.43	

$^{**}p < .01$

Table 1 continued

Source	df	ms	F
Notes by intonation units (continued)			
Error$_3$ (w)	28	2.86	
Total	101		
Stresses by time units			
Between Subjects	16		
Group (C)	2	37.63	9.46**
Error (b)	14	3.98	
Within Subjects	17		
Context (A)	1	11.01	2.01
AC	2	.09	.02
Error (w)	14	5.86	
Total	33		
Stresses by intonation units			
Between Subjects	53		
Group (C)	2	15.69	7.13**
Error (b)	51	2.20	
Within Subjects	54		
Context (A)	1	25.00	23.58**
AC	2	30.96	29.21**
Error (w)	51	1.06	
Total	101		
Pitch levels by time units			
Between Subjects	16		
Group (C)	2	40.06	6.80**
Error (b)	14	5.89	

**$p < .01$

Table 1 continued

Source	df	ms	F
	Pitch levels by time units (continued)		
Within subjects	221		
Context (A)	1	14.63	5.36*
Pitch (B)	6	795.86	53.39**
AB	6	54.54	5.46*
AC	2	.64	.23
BC	12	34.67	2.33*
ABC	12	46.48	4.66**
Error (w)	182		
Error_1 (w)	14	2.73	
Error_2 (w)	84	14.91	
Error_3 (w)	84	9.98	
Total	237		
	Pitch levels by intonation units		
Between Subjects	53		
Group (C)	2	31.17	8.56**
Error (b)	51	3.64	
Within Subjects	702		
Context (A)	1	41.90	3.72
Pitch (B)	6	214.82	50.67**
AB	6	26.49	17.00**
AC	2	1.52	.13
BC	12	13.54	3.10**
ABC	12	12.62	8.04**

* $p < .05$
**$p < .01$

Table 1 continued

Source	df	ms	F
Pitch levels by intonation units (continued)			
Error (w)	663		
$Error_1$ (w)	51	11.27	
$Error_2$ (w)	306	4.24	
$Error_3$ (w)	306	1.57	
Total	755		

Chapter
V-4

A NOTE ON THE PERCEPTION AND PRODUCTION OF PHONOLOGICAL VARIATION[1]

Charles E. Terry and Robert L. Cooper

Labov (1966) has demonstrated the relationship between phonological variation and both social stratification and the casualness of the speech elicitation method. The present report describes the perception of phonological variation by members of the same speech community that produces such variation. The report also relates the ability to perceive this variation to several criterion variables.

Method

As part of an intensive study of bilingualism within a Puerto Rican urban neighborhood near New York City, the speech of 45 bilingual respondents elicited during extended interviews was subjected to a phonetic analysis (Fishman, J. A., Cooper, R. L., Ma, R., *et al*., 1968). This analysis was made in terms of the phonetic variation which was observed in the realization of several English and Spanish phonological"variables" over five elicitation contexts.[2] Selected English and Spanish phonological variables were also studied with respect to the respondents' ability to perceive differences between alternative phonetic realizations. Perception was assessed in the following manner. The respondent heard on tape three realizations of a word in which a variable was embedded. (For example: interasado, interasao, interasado). He was then asked whether the third realization sounded more like the first or more like the second. Sixteen items were presented in all, the first half of which represented Spanish variables, and the second half, English variables. The perception test was given to 36 of the respondents.

The ability to perceive the distinction embodied by each item was related to the relative frequencies with which the alternative realizations of that variable were produced in each of the five elicitation contexts. In addition, performance on each perception item was related to ratings on the following criterion scales, made by the linguists who had performed the phonetic analysis.

1. English repertoire range: the number of English speech styles observed and the fluency with which they were judged to be used.

2. Accentedness: the degree to which the phonological and syntactic structures of one language appeared to influence speech produced in the other. High ratings indicated Spanish influence on speech produced in English, low ratings indicated English influence on speech produced in Spanish, and intermediate ratings indicated maximum language distance, with each language exercising minimal influence upon speech produced in the other.

3. Reading: the degree to which the respondent was able to read in one language only. High ratings indicated that the respondent could read only in Spanish (or not at all), low ratings indicated that he could read only in English, and intermediate ratings indicated that he was able to read in both languages without difficulty. The ratings were based on the respondent's reading of two word lists and four paragraphs, presented during the interview. Half of these were in English and the other half in Spanish.

Results

No differences were observed between the average difficulty of the English and Spanish items, both groups of items being passed on the average by two-thirds of the respondents. With only two exceptions, the percentage passing each item was relatively stable, varying between 50% to 75%.

The correlations obtained between the ability to perceive each of the 16 items and performance on the corresponding alternative variants in each of five contexts constituted 215 coefficients in all. Of these, only 24 were significant ($p < .05$). Inasmuch as one could expect that about 11 coefficients would be significant by chance, it can be said that in general perception and production were not particularly related.

Although performance on the perception test was not a good predictor of phonological variation as observed in speech, performance on three perception items were significantly related to ratings on the criterion variables. Two of these tested perception of Spanish variables (n#V, as in [pan/paŋ]; sC, as in [gusto/guhto]) and one tested perception of an English variable (I, as in [hIt/hɨt]). These coefficients, presented in Table 1, ranged from .23 to .48, with the median at .43.

Summary

Puerto Rican bilinguals' perception of phonological variation in Spanish and English was in general not found to be related to the relative frequency of their production of these variables. Perception of some items, however, was related to performance on three criterion variables. The latter finding suggests that the use of selected perception items, which are relatively easy to administer, might be useful in language surveys where the validity of more direct questioning is in doubt.

Footnotes

[1] The research reported herein was supported by DHEW Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals," Joshua A. Fishman, Project Director. Data analysis was made possible by a grant to the Project Director by the College Entrance Examination Board.

[2] Detailed descriptions of the phonological variables studied as well as of the five elicitation contexts in which they were observed may be found in R. Ma and E. Herasimchuk, "Linguistic dimensions of a bilingual neighborhood," in J. A. Fishman, R. L. Cooper, R. Ma, *et al.*, *Bilingualism in the Barrio*. Final Report, Yeshiva University, 1968, Contract No. OEC-1-7-062817-0297, U.S. Department of Health, Education, and Welfare.

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Table 1

CORRELATIONS BETWEEN SELECTED PERCEPTION ITEMS AND THREE CRITERION VARIABLES (N=35)

Perception item	Criterion variable		
	English repertoire range	Accentedness	Reading
n#V [pan/paŋ]	.23	-.44**	-.47**
sC [gusto/guhto]	.35*	-.34*	-.48**
I [hIt/hit]	.40*	-.46**	-.43**

* $p<.05$
**$p<.01$

Part VI

SUMMARY AND CONCLUSIONS

Chapter
VI

Abstract

Alternative Measures of Bilingualism

Joshua A. Fishman and Robert L. Cooper

A variety of techniques for the measurement and description of bilingualism, derived separately from the disciplines of linguistics, psychology, and sociology, were administered to the same respondents, 48 Spanish-English bilinguals who lived in a Puerto Rican neighborhood near New York, in order to assess the relationship among these measures and their relative utility as predictors of four proficiency criterion variables. A factor analysis, performed on the intercorrelations among 124 scores, indicated areas of interdisciplinary overlap as well as uniqueness. The best predictors of the criteria were obtained from retrospective reports of proficiency and usage. However, scores from other techniques provided significant increments in the cumulative prediction of the four proficiency criteria, a very high proportion of whose variance was explainable through multiple regression analysis.

ALTERNATIVE MEASURES OF BILINGUALISM[1]

Joshua A. Fishman and Robert L. Cooper

Yeshiva University

Like the elephant encountered by various blind men, bilingualism has been described differently by psychologists, linguists, and sociologists. The work upon which the present report is based was designed to integrate those aspects of bilingual behavior which previously had been studied separately. The paper considers two questions. First, what relationships exist among descriptions of bilingualism which employ methods derived from different disciplines? More specifically, to what extent do linguistic, psychological, and sociological measurements co-vary when applied to the same bilingual speakers? Second, what is the relative utility of such measures in terms of their ability to predict, both individually and jointly, the same criterion behaviors?

Method

Respondents

A variety of linguistic, psychological, and sociological measurements of bilingual behavior were designed for use in a study of Puerto Ricans in Greater New York. Selected for particularly intensive study were the people living within a four-block Puerto Rican section of the "downtown" area of Jersey City. In this target area lived 431 persons of Puerto Rican background, comprising 90 households in all. More than half (58%) had been born in Puerto Rico and of these, more than half (60%) had been living on the mainland for ten years or less. They were a very young group, with 60% below the age of 18 and 28%

below the age of 6. In general, the adults were poorly educated, and they held low income jobs. Half the adults had received no more than an elementary education, and of those who were employed, most worked as operatives or laborers.

Census

The first contact with persons living in the neighborhood was by means of a door-to-door language census (Fishman, 1968). Bilingual census-takers asked a representative from each household to respond to a series of questions about himself and about the other members of the household. There were a series of language questions, including items assessing proficiency in various English and Spanish language skills (e.g., "Can you understand a conversation in English?"), frequency of English and Spanish usage in different contexts (e.g., "What language do you most frequently use at work for conversation with fellow-workers?"), and the first language learned for various purposes (e.g., "What was the first language in which you read books or newspapers?"). Preceding the language questions were several demographic queries including items dealing with age, sex, birthplace, education, occupation, and number of years of residence in the United States and in Jersey City.

Psycholinguistic Interview

Of those who were 13 years or older, over one-fifth (N=48) agreed to particpate in a tape-recorded interview which lasted from two to four hours. An attempt was made to secure both male and female respondents who would represent the range of ages (of those 13 or older) and the range of educational and occupational backgrounds to be found in the neighborhood. The interviews, which were held in the respondent's home or in a field office in the neighborhood, were conducted by bilinguals who were able to use whatever language or combination of languages that was preferred by a given respondent.

The interview was designed for two purposes. First, it was devised to yield information about the respondent's performance on various proficiency and self-report devices adapted from the psychological literature. Second, it was designed to elicit samples of the respondent's English and Spanish speech under conditions of varying casualness or informality. The different sections of the psycholinguistic interview are briefly described below.

Listening comprehension. Five tape-recorded, naturalistic conversations, between Spanish-English bilinguals living in New York, were obtained and employed as tests of listening comprehension and interpretation (Cooper, Fowles, and Givner, 1968). Each conversation, in which the speakers switched back and forth between English and Spanish, was intended to represent a different type of social situation or context. After hearing a conversation twice, respondents were asked a series of questions in order that their comprehension and interpretation of the conversation might be assessed. Several types of questions were asked, including items testing comprehension of the Spanish portions of the conversation, items testing comprehension of the English portions, questions requiring the respondents to make inferences about the social relationships between speakers, questions asking the respondent to recall which speakers used which language and when, and questions about the appropriateness of using English or Spanish during specific portions of the conversation.

Word naming. Respondents were asked to give, within one-minute time limits, as many different English (or Spanish) words that named objects or items appropriate to a given context or domain as they could (Cooper, 1968). For example, respondents were asked to give as many different English (Spanish) words as possible that named things that could be seen or found in a kitchen. Respondents named words for each of five domains--family, neighborhood, religion, education, and work--responding to all domains in one language and then to all domains in the other.

Word association. Respondents were also asked to give continuous associations, within one-minute periods, to each of the following stimulus words: home, street, church, school, factory, casa, calle, iglesia, escuela, and factoría.[2] These stimuli were intended to represent the five contexts or domains of family, neighborhood, religion, education, and work. Responses were restricted to the language of the stimulus word. The word association task always followed the word naming task, but there was always at least a 10-minute interval between them, during which time another technique was administered.

Word frequency estimation. Respondents were asked to rate, on an 8-point scale, the frequency with which they heard or used each of 150 different words, of which half were in Spanish and half in English (Cooper and Greenfield, 1968b). The 75 words in each language were comprised of 5 sets of 15 words, the words for each set having been selected to represent a domain or context. The domains family, friendship, religion, education, and work were employed. For example, some of the English words which represented the domain of education were teacher, blackboard, history, and science. Respondents rated all the words in one language before rating the words in the other. The items representing each domain were evenly distributed throughout the list of words in each language.

Spanish usage rating scale. Respondents were asked to rate, on an 11-point scale, the degree to which they used Spanish (relative to English) with other Puerto Rican bilinguals at home, in their neighborhood, at church, at school, and at work (Cooper and Greenfield, 1968a). For each context, degree of usage was rated assuming interlocutors who varied by age, sex, and relationship to the respondent. For example, respondents were asked how much of their conversation was typically in Spanish when talking to Puerto Rican neighbors of the same age and sex, in their neighborhood.

Linguistic elicitation procedures. Based both on the notion of verbal repertoire, advanced and elaborated by Gumperz (1964, 1967), and on the construct of linguistic variable, as developed by Labov (1963, 1966), an attempt was made to vary systematically the interview contexts in which English and Spanish were elicited (Ma and Herasimchuk, 1968). By extending Labov's method to bilingual speech situations, an attempt was made to obtain speech in two languages that varied along a continuum of carefulness or casualness. Thus, the phonological variation associated with changes in the interview context could be observed in English and in Spanish. The degree of systematic phonological variation observed in each language could serve as one index of the extent of the speaker's linguistic resources or verbal repertoire. Phonological variation was observed in terms of five elicitation procedures or contexts. Described below, they are presented in order of the formality or carefulness of the speech elicited, with the most formal context first and the most casual last.

1. Word list reading. Two brief lists of words, one in English and one in Spanish, were given to the respondent to read aloud. The lists contained examples of sounds which were hypothesized to vary as a function of the elicitation procedure.

2. Paragraph reading. Four brief paragraphs, two in each language, were also given to the respondent to read aloud. Like the word lists, the paragraphs were constructed so as to include certain phonological variables.

3. Word naming. Performance in the word naming test (described earlier) was studied as an example of speech that was midway in formality between more careful speech, represented by reading aloud, and more casual speech, represented by free conversation.

4. Interview style. The speech produced during the formal question and answer periods of the interview, particularly responses to questions about the listening comprehension passages, were analyzed as examples of relatively careful discourse.

5. Casual speech. The interviewers attempted to elicit casual speech in English and in Spanish by encouraging respondents to digress from the interview material and by asking questions designed to promote personal anecdotes or excited replies. Casual speech was sometimes also obtained fortuitously, as when the respondent was called to the telephone or when he spoke to a child who had come into the room.

Instruments: Summary

The techniques which have been described may be classified in terms of two variables: the type of behavior described and the source of the observation. With respect to the first, the methods can be characterized as describing either language proficiency or language use. Language proficiency refers to what the person can do. Language use refers to what he typically does. With respect to the second category, the techniques can be described as relying either on the respondent's own performance, as on the word naming task, or on a retrospective report of his behavior. (The retrospective reports were either by the respondent himself, as in the Spanish usage rating scale, or by someone who knew the respondent well, as on the census.) The intersection of these two types of performance and source of observation forms a four-celled matrix into which each of the techniques can be placed. The four-way classification is presented in Table 1.

Insert Table 1 about here

A priori scoring

Two types of scoring were employed: scoring based on a priori classifications and scoring based on the clustering of items that emerged from factor analyses (empirical scoring). The a priori scores are described for each of the various techniques, as follows.

Census. A difference score, for which the English rating was subtracted from the Spanish rating, was computed for each of the four skills of listening, speaking, reading, and writing. In addition, a score reflecting the degree to which Spanish was claimed for use at home (the mean of three items) and a score reflecting the degree

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to which Spanish was the first language acquired (the mean of four items) were computed. In addition, responses to a single query, language preferred for conversation, were treated as scores for purposes of the subsequent data analyses.

Listening comprehension. For each of the five recorded conversations two difference scores were computed. One was the percentage correct of items assessing comprehension of the English portion subtracted from the percentage correct of items assessing comprehension of the Spanish portion. The second was the percentage of times the respondent correctly identified the use of English (who used English at what points during the conversation) subtracted from the percentage of times he correctly identified the use of Spanish. These difference scores are referred to as language comprehension and language identification scores, respectively.

Word naming. Five difference scores were computed, one for each domain, in which the number of English words produced was subtracted from the number of Spanish words produced. In addition, a difference score was computed for respondents' performance on a noncontextualized (general) word naming task, used as a trial run.

Word association. Five difference scores were computed in the same manner as for the word naming task. In addition, the proportion of "human" responses (words that named people, e.g., teacher, policeman) was computed for each domain in each language (Findling, 1968).

Word frequency estimation. Five difference scores were computed, one for each domain, in which the average English rating for the 15 words representing a given domain was subtracted from the average Spanish rating.

Spanish usage rating. Five scores were computed, one for each context, representing the average amount of Spanish (as a proportion of a total conversation) that the respondent reported he used with the various interlocutors specified.

Phonological variables. The number of observations of each of a set of linguistic variants was counted for each of the five elicitation contexts. For example, in Puerto Rican Spanish, three variants of /s/ in word-final position are possible: [s], [h], and [ø]. The number of occurrences of each of these variants was counted in each of the five contexts. In all, variation within 17 sets of English variables and 8 sets of Spanish variables was described in this fashion.

Empirical scoring

All the items which entered into the a priori scores for a given technique were subjected to a factor analysis. Factor scores (based on all items that clustered together into a "factor") were computed for two techniques as follows.

Census. Scores based on five factors were computed: Spanish literacy (eight items referring for the most part to the reading and writing of Spanish); Spanish-oral (four items referring to the speaking and understanding of Spanish); English (four items referring to the ability to understand, speak, read, and write English); Spanish-at work (three items referring to the use of Spanish at work); and Spanish-in religion (three items referring to the use of Spanish for religious purposes).

Word frequency estimation. Scores based on five factors were computed. These were English (68 items, most of which were English words); Spanish (46 items, most of which were Spanish words); Skill

(7 items, 5 of which were English words, related to education and professionalism); Work (24 items, 18 of which were Spanish words, related primarily to the domain of work); and Religion (5 items, 4 of which were in Spanish, related to the domain of religion).

For the other techniques, factor scores were not computed although factors were derived. Items that represented each factor (generally, the items with the highest loadings) were selected for those other techniques and were employed in the subsequent analyses along with the factor scores and a priori scores mentioned earlier.

Criterion scores

The a priori and empirical scores were studied in relationship to four criterion scores. The criterion scores were based on ratings made by two linguists who had scored the phonological variables. The four criteria are described below. All were based on ratings of performance as recorded during the psycholinguistic interview.

Accentedness. Respondents were rated in terms of the degree to which the phonological (and syntactic) structures of one language appeared to influence speech produced in the other. A seven-point scale was used on which high scores indicated Spanish influence upon English speech, low scores indicated English influence upon Spanish speech, and scores in between indicated maximum language distance, or no influence by either language upon speech produced in the other.

English repertoire range. Respondents were rated in terms of the number of English speech styles which they appeared to use and the fluency with which these were employed. A six-point scale was used, ranging from knowledge of only a few words and phrases, at one extreme, to the ability to employ both careful and casual speech styles, in a maximally fluent manner, at the other.

Spanish repertoire range. Respondents were also rated in terms of the number and fluency of Spanish speech styles which they were judged to use. A four-point scale was employed, which ranged from the use of only a single, casual style to the fluent use of several speech styles, including more careful, formal Spanish.

Reading. Based on their performance on the reading tasks (word lists and paragraphs), respondents were rated, on a five-point scale, in terms of their ability to read in the two languages. High scores indicated that the respondent could read only in Spanish (or not at all), low scores indicated that he could read only in English, and intermediate scores indicated that he could read in both languages.

Data analysis

Two principal analyses were performed, a factor analysis and a regression analysis.

Factor analysis. With the exception of scores obtained from one technique, all a priori and empirical scores were intercorrelated. (Empirical scores included factor scores, obtained from the census and the word frequency estimation technique, as well as item scores that represented factors obtained from the other techniques.) The exception was in the case of the phonological analysis. Inasmuch as there were over 500 phonological a priori scores per person, only selected phonological a priori scores were used for the intercorrelational matrix. These were chosen on the basis of low loadings on the factors which had been determined for the phonologcial variables. Thus, the empirical scores from the phonological analysis were items with high factor loadings, and the a priori scores were items with low factor loadings. In all, 124 scores, obtained from seven techniques, were intercorrelated. Half the scores were a priori and half were empirical. A verimax orthogonal solution was then sought for the 124 x 124 matrix of intercorrelations.

Regression analysis. Intercorrelations were also obtained among the 4 criterion variables, 6 demographic variables, and 124 a priori and empirical scores. Multiple regression analyses were then performed between selected predictor variables and each of the four criterion variables. The predictor variables for each criterion were selected on the basis of their correlations with the criterion and on the basis of their correlations with each other as observed in the 124 x 124 matrix. Since a seven-factor solution appeared to be the best one yielded by the analyses of this matrix, for each criterion, the item from each factor that had the highest correlation with the criterion was selected. In this way, seven predictor variables were selected for each criterion. The selection procedure yielded maximum independence of predictors (since each entered into a different factor) combined with maximum power of individual predictors (since each had the highest correlation on its factor with the criterion), thus permitting maximum cumulative prediction of the criterion.[3]

Results

Factor Analysis

The seven factors which were obtained may be briefly described as follows.[4]

Factor 1 (Spanish productivity). The first factor characterized performance on the Spanish word naming and Spanish word association subtests.

Factor 2 (English productivity). The second factor characterized performance on the word naming and word association tasks when expressed as difference scores or when expressed in terms of the English subscores. Low difference scores and high English scores were related, suggesting that variation in these difference scores was associated more with variation in English productivity than with Spanish productivity.

Factor 3 (listening comprehension). The third factor appeared to describe performance on the listening comprehension items when expressed as difference scores.

Factor 4 (claimed Spanish). This factor characterized Spanish proficiency and Spanish usage as reported either by the respondent (Spanish usage rating scale) or by a household member (census).

Factor 5 (unaccented English speech). The fifth factor described performance in terms of the frequency of some observed English phonological variables characteristic of unaccented English.

Factor 6 (sociolinguistic sensitivity). The sixth factor characterized performance on listening comprehension items requiring the respondent to identify the use of English and Spanish and to make inferences about the social meaning of language usage.

Factor 7 (Spanish word frequency estimation). The last factor appeared to describe performance on the word frequency estimation task, expressed either in terms of a difference score or in terms of Spanish alone.

These factors may be characterized in terms of the different types of technique or task summarized in the four-fold classification of Table 1. Scores derived from the techniques categorized within a single quadrant, the proficiency scores based on performance, clustered into five different factors, namely 1, 2, 3, 5, and 6. Scores based on the techniques classified within two quadrants, retrospective reports of proficiency and retrospective reports of usage, clustered into two factors on the basis of the directness of the techniques employed. The scores obtained from the relatively direct questions used in the census and the Spanish usage rating scale formed one of these factors, and the scores obtained from the relatively indirect word frequency estimation task formed the other. Usage scores based on performance, which comprised the remaining quadrant, entered several factors without characterizing any.

The factors may also be characterized in terms of the two types of scores which were employed. Factor 1 (Spanish productivity) was made up primarily of empirically derived scores and factor 3 (listening comprehension) of a priori scores. The other factors were each composed about equally of the two types of scores.

It is also possible to describe the factors in terms of the disciplines from which the scores were derived. Whereas all of the sociologically derived scores were confined to a single factor (claimed Spanish), the linguistically and psychologically derived scores contributed to all factors. Thus, the sociological scores were more homogeneous than were the scores derived from the other two disciplines. On three factors (listening comprehension, non-accented English, and word frequency estimation) psychological and linguistic scores were found in about equal proportions, and on three factors (Spanish productivity, English productivity, and sociolinguistic insensitivity) the psychologically derived scores predominated.

In sum, the most homogeneous scores were those derived from retrospective reports and from sociologically derived techniques. The most heterogeneous were performance scores and scores derived from the psychological and linguistic disciplines.

Regression Analysis

Table 2 presents the intercorrelations among the criterion variables. Three of the criterion variables displayed substantial correlations with one another (r's between .61 to .74), all of which were significant beyond the .01 level. The Spanish repertoire range scale was not significantly related to the other criteria, however. As can be seen from the standard deviations of these variables (Table 2), the respondents were much more alike in terms of their Spanish repertoire ratings ($p < .01$) than they were in terms of their scores on the other interim variables. The nonsignificant correlations obtained with the Spanish repertoire scale can be attributed to the greater homogeneity of their Spanish repertoire ratings, a homogeneity which is consistent with the fact that for most of the respondents, Spanish was the first language learned and was primarily a home and neighborhood language. Thus, there was more opportunity for them to vary with respect to their English skills (due to differential exposure to English at school, at work).

Insert Table 2 about here

Table 3 presents the intercorrelations between the criterion and demographic variables. Spanish repertoire range proved to be significantly correlated with only one demographic variable, ruralness of birthplace, with the more rural speakers tending to have a narrower Spanish repertoire range. The other criteria, however, were significantly correlated with most of the demographic items. In general, those who were in the United States for longer periods of time, those who were younger, those with higher occupational status, those with more formal education, and those born in more urban places, tended to have a wider English repertoire range, to have less of a Spanish accent, and to read English better than Spanish. The sex of respondent was not significantly related to any of the criterion variables.

Insert Table 3 about here

Of the a priori and empirical scores that best predicted each of the four criterion variables, the census scores were by far the most successful. When the seven scores displaying the highest correlations with each of the four criteria were examined, it was found that 17 of the 28 had been obtained from the census, Scores from other techniques, when added to those from the census, however, could sometimes substantially improve the prediction of the criteria. The improved predictions obtained by pooling scores from different factors can be seen in Tables 4-7. These tables present the cumulative predictions obtained by successive additions of predictors which represent different factors (and thus tend to have relatively low correlations with one another).

Insert Tables 4-7 about here

Each table shows several figures one of which indicates the correlation between the criterion variable and a single predictor (or, where data are missing, between the criterion and a dummy variable representing the presence or absence of the predictor). This correlation is in the column headed R. For example, Spanish literacy has a correlation of .586 with the Spanish repertoire range (Table 6). Performance on the next item, plus the absence or presence of data from that item, have a correlation of .343 with the criterion. The method used requires the predictors to be added in a specified order. Predictors are usually added in order of their correlation with the criterion, with those having the highest relationship placed first and those having the lowest relationship placed last. The significance of the correlations between an individual predictor (including its presence or absence) and the criterion can be seen in the column headed FR^2. Note that in the case of Spanish repertoire range, only the first predictor is significantly related to it. However, the addition of other predictors cumulatively improves the prediction of that criterion. The significance of each successive addition can be seen in the column headed $F\Delta R^2$. Thus, for Spanish repertoire range, the addition of the second variable (although itself not highly related to the criterion), gives significantly better prediction than obtained by the first predictor alone. Similarly, the addition of the fourth and fifth variables significantly improves the prediction over that obtained by three and four variables, respectively.

For three of the criteria, substantial improvement in prediction was obtained by the use of additional variables. The most striking improvement was seen in the case of Spanish repertoire range, where the correlation between criterion and predictors went from .586, for a single predictor, to .862 for seven. For the criterion of accented speech (Table 4), however, the first variable had such a high correlation with the criterion (r=.847) that additional variables were unable to significantly improve prediction. For all criteria, the proportion of variance explained by multiple prediction was quite high, ranging from 65% (Cum R=.803) for reading to 75% (Cum R=.868) for accented speech.

Discussion

The techniques described in the present report comprise a "*maxi-kit*" *from* which the student of bilingualism can select the "mini-kit" he needs for work in the field. Which ones should he select? The answer depends partly, of course, on what it is he wants to know, and partly on the socio-political climate in which he is operating. If he is interested in fairly unidimensional questions, and if language issues are not particularly sensitive, he can ask directly by means of a census-type approach. If, however, he is dubious about the validity of answers to such questions, he should select a somewhat more disguised measure of proficiency and usage, such as the word frequency estimation technique. If the investigator is concerned with more complex criteria, he may need to use a combination of techniques.

The selection of any particular "mini-kit" for a particular population would ideally be made on an empirical basis. For example, let us suppose that our entire battery of techniques had been administered in Jersey City for the purpose of subsequently selecting the most effective instruments to be used in a language survey to be performed upon a quite similar but much larger population. Let us suppose, further, that the larger survey would be conducted in order to describe Puerto Rican bilinguals with respect to the same criteria employed in Jersey City: bilingual accentedness, bilingual reading, English repertoire range, and Spanish repertoire range. If we wished to combine maximum prediction of all four criteria, with a minimum of interviewing time, we would selected the following items or tasks: 1) the three census items asking which language is spoken, written, and read at home; 2) the eight census items asking for ratings in Spanish proficiency and usage in terms of reading and writing skills; 3) one item asking how much Spanish is used with older, bilingual Puerto Rican women in the neighborhood; 4) a task requiring the respondent to name, within a one-minute period, as many different English words as possible that identify objects seen or found in a church; 5) a task requiring the respondent to listen to a brief, taped bilingual conversation and to comment on the appropriateness of the languages chosen for the particular purposes of that conversation; and 6) a rating (by the census taker on the spot, or later by a phonetic transcriber if the interview is tape recorded) of the frequency with which the English variant [aɨ] is used during the interview.[5] Item 1 alone would be used to predict accent. Items 1 and 3 would be used to predict reading. English repertoire range would also be predicted by item 1 to which would be added item 4.

Finally, Spanish repertoire range would be predicted by items 2, 5, and 6.[6]

In the example cited, the relatively global criteria of reading and accentedness would be predicted by two scores, both obtained from retrospective reports. The more complex criteria, English repertoire range and Spanish repertoire range, would also require retrospective reports for their best prediction, but in addition, they would require scores obtained from performance tasks. For English repertoire range, a psychologically derived task would be required and for Spanish repertoire range both psychologically derived and linguistically derived tasks would be required to supplement a retrospective report. The use of these predictors would yield multiple correlations of .85, .74, .72, and .75 with accent, reading, English repertoire range, and Spanish repertoire range, respectively, and they would require less than 30 minutes in all to administer.

In the present example, techniques derived from separate disciplines contributed uniquely to the multiple prediction of complex criteria. Disciplinary uniqueness can also be concluded, of course, from the factor analysis, some of whose dimensions can be described primarily in terms of scores derived from a single discipline. The factor analysis, however, also revealed disciplinary redundancy, as can be seen from the clustering together, on several factors, of scores derived from separate disciplines. Such redundancy suggests that the bilingualism which has been studied separately by linguists, psychologists, and sociologists has been to a large extent the same animal after all. However, the contributions made possible by disciplinary uniqueness also suggests that the phenomenon of bilingualism can best be described via an interdisciplinary approach. Although the disciplines overlap, none can describe the whole elephant by itself.

Summary

A variety of techniques for the measurement and description of bilingualism, derived separately from the disciplines of linguistics, psychology, and sociology, were administered to the same respondents, 48 Spanish-English bilinguals who lived in a Puerto Rican neighborhood near New York, in order to assess the relationship among these measures and their relative utility as predictors of four proficiency criterion variables. A factor analysis, performed on the intercorrelations among 124 scores, indicated areas of interdisciplinary overlap as well as uniqueness. The best predictors of the criteria were obtained from retrospective reports of proficiency and usage. However, scores from other techniques provided significant increments in the cumulative prediction of the four proficiency criteria, a very high proportion of whose variance was explainable through multiple regression analysis.

Footnotes

[1] The research reported in this paper was supported by a grant from the U.S. Office of Education, Contract No. OEC-1-7-062817-0297, "The Measurement and Description of Language Dominance in Bilinguals." Data processing in connection with this research was supported by a grant from the College Entrance Examination Board.

[2] In the Puerto Rican Spanish of Greater New York, factoría, not fábrica, is the equivalent of factory.

[3] Inasmuch as there were missing data for some of the predictor variables, the regression analysis also employed correlations between the criterion and the presence or absence of data from the predictors. In other words, where there were missing data, a multiple correlation was obtained between the criterion, on the one hand, and the predictor score plus a score based on the presence or absence of the predictor, on the other.

[4] The factors are described in greater detail in Fishman, J. A., Cooper, R. L., and Ma, R. Bilingualism in the Barrio. Final Report, 1968, Yeshiva University, Contract No. OEC-1-7-062817-0297, U.S. Department of Health, Education, and Welfare.

[5] The variant [ai] is one of the possible realizations of the vowel that appears in my, I, mine, etc., words which, in the normal course of a census, ought to occur frequently if the interviewer is able to elicit English speech.

[6] The items chosen for the "mini-kit" were in general those with the highest first order correlations with the criterion. However, in two instances predictors with slightly lower correlations were chosen on the basis of their greater administrative convenience

where no significant FAR^2 was involved between the most convenient and the most powerful predictors.

If all six items in the mini-kit were routinely administered the resulting cumulative multiple correlations (Cum R) with the four criterion measures would be as follows: accentedness: .898; reading: .760; Spanish repertoire range: .769; English repertoire range: .783. The first two criteria are predicted as well (or in the case of accentedness, even better) by the mini-kit as by the full seven factor battery. The last two criteria are predicted quite well by the mini-kit but the full seven factor battery provides appreciably higher cumulative predictions for them (.862 for SRR; .808 for ERR).

If in trying to improve our mini-kit prediction of ERR we add the two "more global criteria" to the 2 item mini-kit for predicting English repertoire range the cumulative multiple correlation rises to .775. If, further, we add two new global ratings as predictors, Observed Spanish Usage Score and Observed American Role Repertoire Range, the resulting Cum R rises to .828, i.e., to a level somewhat higher than was obtained by the seven factor multiple prediction (.808) shown in Table 7. Thus, if the full seven factor approach to predicting English repertoire range is too time-consuming, then there would seem to be good reason to use the 3 item mini-kit plus four global ratings instead.

No similar improvement occurs from the addition of the two old "more global criteria" (accentedness and reading) and two new global ratings (Observed Spanish Usage Score and Observed Puerto Rican Role Repertoire) to the 3 item mini-kit for predicting Spanish Repertoire Range. (Interestingly enough the range of Puerto Rican roles available to our subjects is more uniform [and, therefore, less related to Spanish repertoire range] than is their range of American roles.) Seemingly, there is no good shortcut to the prediction of Spanish repertoire range in a population such as ours (where almost everyone has pretty much the same range) and the complete seven factor kit is needed if the drop from a cumulative R of .862 to one of .769 is considered to be too great.

The apparent adequacy of a small mini-kit of language measure should permit the future investigator of bilingual populations to spend proportionally more of his research time and funds on studying other-than-language behaviors of such populations.

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Table 1

CLASSIFICATION OF TECHNIQUES FOR BILINGUAL MEASUREMENT

Source of Observation	Behavior Described	
	Proficiency (What a person can do)	Usage (What a person typically does)
Performance	phonological analysis (reading contexts)	phonological analysis (speech contexts)
	word naming	
	word association	
	listening comprehension	
Retrospective Report	census (proficiency items)	census (usage items)
		usage rating scale
		word frequency estimation

Table 2

INTERCORRELATIONS AMONG CRITERION VARIABLES

	Correlation				$\bar{x}$	S.D.
Variable	1	2	3	4		
1. Accentedness		.74**	.27	-.69**	2.00	1.74
2. Bilingual Reading			.19	-.61**	2.44	1.43
3. Spanish repertoire range				.04	2.04	.76
4. English repertoire range					2.84	1.61

**$p < .01$

Table 3

CORRELATIONS BETWEEN DEMOGRAPHIC AND CRITERION VARIABLES

Demographic variable	Criterion			
	Accentedness	Bilingual Reading	Spanish Rep. Range	English Rep. Range
Age	53**	59**	25	-35*
Birthplace (urban v. rural)	52**	43**	38**	-20
Occupation	-51**	-42**	01	53**
Education	-30**	-38**	19	44**
Years in U.S.	-58**	-44**	-23	40**
Sex	-08	-08	-01	01

* $p < .05$
**$p < .01$

Table 4

THE CUMULATIVE PREDICTION OF ACCENTEDNESS

Cumulative predictors	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
1. Language used more often at home (census)	.847	.847	.718	.847	.718	102.57**	--	--
2. Word naming, education	.509							
Presence v. absence of variable 2	-.377	.636	.405	.858	.736	13.53**	.018	1.29
3. Listening comprehension, third conversation	.447							
Presence v. absence of variable 3	-.119	.462	.214	.861	.742	5.35**	.006	.43
4. Listening comprehension, fifth conversation	.398	.398	.158	.861	.742	7.52**	.000	.00
5. Word frequency estimation, education	.379							
Presence v. absence of variable 5	-.230	.444	.197	.863	.745	4.95*	.003	.21
6. Language used with bilingual men in neighborhood (usage rating scale)	.286							
Presence v. absence of variable 6	-.149	.319	.102	.864	.747	2.32	.002	.13
7. Frequency of Spanish ($\tilde{v}$ for $\acute{v}N$), word naming	.206							
Presence v. absence of variable 7	-.252	.323	.104	.868	.753	2.36	.006	.37

Note:--Unless specifically noted, predictors are scales on which high scores represent relatively greater proficiency in Spanish and low scores relatively greater proficiency in English.

$^*p < .05$ $^{**}p < .01$

Table 5

THE CUMULATIVE PREDICTION OF BILINGUAL READING

Cumulative predictors	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
1. Language used more often at home (census)	.681	.681	.464	.681	.464	35.69**	--	--
2. Language used with older bilingual women in neighborhood (usage rating scale)	.423	.423	.179	.735	.541	8.95**	.077	7.00*
3. Listening comprehension, fifth conversation	.502							
Presence v. absence of variable 3	-.099	.512	.262	.769	.591	7.28**	.050	2.27
4. Word frequency estimation, education	.436							
Presence v. absence of variable 4	-.322	.542	.294	.784	.615	8.17**	.024	1.09
5. Frequency of Spanish (Ṽ for V́N), word naming	-.383	.383	.147	.793	.629	7.00**	.014	1.27
6. Language used with younger bilingual men in neighborhood (usage rating scale)	.306							
Presence v. absence of variable 6	-.248	.390	.152	.798	.637	3.61*	.008	.36
7. Listening comprehension, third conversation	.266							
Presence v. absence of variable 7	-.217	.343	.118	.803	.645	2.68	.008	.36

Note: Unless specifically noted, predictor variables are scales on which high scores indicate Spanish dominance and low scores English dominance.

* $p < .05$
**$p < .01$

Table 6

THE CUMULATIVE PREDICTION OF SPANISH REPERTOIRE RANGE

Cumulative predictors	r	R	R^2	Cum R	Cum R^2	F_{R^2}	ΔR^2	$F_{\Delta R^2}$
1. Spanish literacy (census)	.586	.586	.343	.586	.343	21.44**	--	--
2. Sensitivity to language usage (fourth conversation)	-.339							
Presence v. absence of variable 2	.120	.343	.118	.674	.454	2.68	.111	3.96*
3. Spanish word association, religion	-.353							
Presence v. absence of variable 3	.046	.357	.127	.729	.531	2.86	.077	3.00
4. Frequency of Spanish # [X], casual speech	-.281							
Presence v. absence of variable 4	.116	.302	.091	.807	.652	1.96	.121	6.10**
5. Frequency of English [aɨ], interview style	.304							
Presence v. absence of variable 5	.189	.341	.116	.855	.732	2.64	.080	5.00*
6. Frequency of English [oᵊ] CV, interview style	-.205	.205	.042	.857	.735	1.83	.003	.37
7. Word frequency estimation (work factor score)	.243							
Presence v. absence of variable 7	.235	.338	.114	.862	.743	2.59	.008	.44

Note:--Unless specifically noted, predictors are scales on which high scores represent relatively greater proficiency in Spanish and low scores relatively greater proficiency in English.

$* \ p < .05$
$** p < .01$

Table 7

THE CUMULATIVE PREDICTION OF ENGLISH REPERTOIRE RANGE

Cumulative predictors	r	R	R^2	Cum R	Cum R^2	F_{R2}	ΔR^2	$F_{\Delta R2}$
1. Language used more often at home (census)	-.603	.603	.364	.603	.364	24.27**	--	--
2. English word naming, religion	.458							
Presence v. absence of variable 2	.463	.646	.417	.717	.515	13.93**	.151	6.25**
3. Listening comprehension, third conversation	-.443							
Presence v. absence of variable 3	.316	.543	.295	.749	.561	8.17**	.046	1.92
4. Listening comprehension, fifth conversation	-.542							
Presence v. absence of variable 4	.184	.573	.328	.784	.615	9.65**	.054	2.45
5. Word frequency estimation, education	-.398							
Presence v. absence of variable 5	.285	.490	.240	.785	.617	6.32**	.002	.08
6. "Human response" ratio, Spanish word association, neighborhood	.290							
Presence v. absence of variable 6	.492	.565	.319	.793	.629	9.35**	.012	.50
7. Frequency of English Vb [ŋ]#, word naming	.228							
Presence v. absence of variable 7	.381	.432	.187	.808	.653	4.65*	.024	1.33

Note: Unless specifically noted, predictors are scales on which high scores represent Spanish dominance and low scores English dominance.

$*p < .05$ $**p < .01$

Appendix 1

Alternative Measures of Bilingualism

Joshua A. Fishman and Robert L. Cooper

Seven Factors Based on the Intercorrelations Among 124 A Priori and Empirical Scores

Factor 1: Spanish Productivity

Variable	N	Loading	Score	Type of Score
57	21	.73	Spanish usage with younger females, at home (usage rating scale)	Empirical
15	29	.69	Frequency of [u,ɚ]#, English interview style	Empirical
40	27	.65	Identifies use of Spanish, 5th conversation	Empirical
26	29	.60	Spanish word association, neighborhood	Empirical
35	36	.59	Listening comprehension item, (English content), 3rd conv.	Empirical
12	29	.58	Frequency of [ɔ] for [ʌ], English interview style	Empirical
25	28	.57	Spanish word association, religion	Empirical
42	31	-.52	Endorses exclusive use of Spanish, 5th conversation	Empirical
94	39	-.49	Listening comprehension (S-E), 3rd conversation	A priori
23	37	.48	Spanish word naming, work	Empirical
74	38	.46	Frequency of [u,ɚ]C, English word list reading	A priori
64	39	-.45	Frequency of [ɣ], V-o, Spanish word list reading	A priori
99	39	.42	Language identification (S-E), 3rd conversation	A priori
10	16	-.40	Frequency of [s]# plural-V, English paragraph reading	Empirical
50	22	-.33	Spanish usage with children at church (usage rating scale)	Empirical
86	28	.33	Frequency of [u,ɚ]C, English interview style	A priori

Factor 2: English Productivity

Variable	N	Loading	Score	Type of Score
087	9	.91	Spanish usage rating, education	A priori
018	26	-.85	Frequency of monomorphemic [t]#V, English interview style	Empirical
119	34	.78	Word naming, work	A priori
085	26	-.67	Frequency of [æ], English interview style	A priori
021	35	-.64	English word naming, religion	Empirical
118	35	.58	Word naming, education	A priori
052	27	-.56	Language usage with older females in neighborhood (usage rating scale)	Empirical
122	28	.54	Word association, religion	A priori
098	42	-.54	Identification of language usage (2nd conversation)	Empirical
051	25	-.54	Language usage with older males in neighborhood (usage rating scale)	Empirical
114	34	.54	Word naming, general	A priori
117	35	.53	Word naming, religion	A priori
022	35	-.52	English word naming, education	Empirical
016	23	-.51	Frequency of [ŋ]# in verbs, English interview style	Empirical
041	32	.51	Sensitivity to language usage (5th conversation)	Empirical
123	29	.47	Word association, neighborhood	A priori
121	28	.43	Word association, work	A priori
120	28	.43	Word association, education	A priori

Factor 2 (continued)

Variable	N	Loading	Score	Type of Score
013	26	.42	Frequency of [oˀ]Cv, English interview style	Empirical
006	29	.41	Frequency of [ŋ]#,Spanish casual speech	Empirical
115	37	.41	Word naming, family	A priori
076	33	.37	Frequency of [a]-voiced consonant, English paragraph reading	A priori
031	39	-.35	Listening comprehension, 1st conversation	Empirical
005	28	-.35	Frequency of [h]#, Spanish casual speech	Empirical
066	39	.27	Frequency of [ŋ]#C, Spanish paragraph reading	A priori

Factor 3: Spanish Listening Comprehension

Variable	N	Loading	Score	Type of Score
093	42	.68	Listening comprehension (2nd conversation)	A priori
073	26	.66	Frequency of #[x], Spanish casual speech	A priori
020	17	.65	Frequency of [∅] for[ɫ]#, English casual speech	Empirical
095	41	.61	Listening comprehension (4th conversation)	A priori
096	41	.57	Listening comprehension (5th conversation)	A priori
004	38	.48	Frequency of [∅] for [s]#, Spanish interview style	Empirical
081	37	.44	Frequency of [ai]^{Cv}, English word naming	A priori
068	41	-.42	Frequency of [s]C, Spanish word naming	A priori
116	32	.41	Word naming, neighborhood	A priori
028	28	-.41	English human ratio, word association, family	Empirical
101	41	-.33	Identification of language usage (5th conversation)	A priori

Factor 4: Claimed Spanish

Variable	N	Loading	Score	Type of Score
103	47	.87	Language used more frequently at home (census)	A priori
108	47	.85	Writing (census)	A priori
048	24	.82	Language used with males of same age in church (usage rating scale)	Empirical
058	47	.81	Spanish literacy (census)	Empirical
107	47	.81	Reading (census)	A priori
089	31	.81	Language used at church (usage rating scale)	A priori
062	47	.78	Language usage, religion (census)	Empirical
049	24	.77	Language used with females of same age at church (usage rating scale)	Empirical
090	37	.76	Language used in neighborhood (usage rating scale)	A priori
056	21	.75	Language used with younger male relatives at home (usage rating scale)	Empirical
102	47	.73	First language (census)	A priori
059	47	-.73	English proficiency (census)	Empirical
060	47	.72	Oral Spanish (census)	Empirical
091	38	.71	Language used at home (usage rating scale)	A priori
105	47	.67	Understanding (census)	A priori
008	34	-.61	Frequency of [æ] , English paragraph reading	Empirical
111	40	.61	Word frequency estimation, religion	A priori
106	47	.60	Speaking (census)	A priori

Variable	N	Loading	Score	Type of Score
043	40	-.60	Word frequency estimation, English	Empirical
109	40	.59	Word frequency estimation, family	A priori
007	34	-.57	Frequency of [ʌ], English paragraph reading	Empirical
069	33	-.56	Frequency of [h] #, Spanish word naming	A priori
104	45	.53	Language preferred for conversation (census)	A priori
054	29	.53	Language used with younger females in neighborhood (usage rating scale)	Empirical
033	25	-.48	Identification of English usage (1st conversation)	Empirical
080	39	-.47	Frequency of [oᵊ], English word naming	A priori
092	34	.47	Listening comprehension (1st conversation)	A priori
077	30	.45	Frequency of [ʉ]#V̊, English paragraph reading	A priori
055	25	.44	Language used with children in neighborhood (usage rating scale)	Empirical
084	39	-.42	Frequency of [ʔ] for [t]#, English word naming	A priori
061	32	.38	Spanish used at work (census)	Empirical
071	40	.38	Frequency of [l] C, Spanish interview style	A priori
032	35	-.36	Listening comprehension (1st conversation)	Empirical

Factor 5: Unaccented English Speech

Variable	N	Loading	Score	Type of Score
053	29	.74	Language used with younger males in neighborhood (usage rating scale)	Empirical
024	34	.56	Spanish word naming, work	A priori
088	21	-.53	Language used at work (usage rating scale)	A priori
014	23	.51	Frequency of [aɨ]Cv, English interview style	Empirical
078	34	.50	Frequency of [t] #, English paragraph reading	A priori
027	29	-.48	English human ratio, word association, neighborhood	Empirical
017	19	-.47	Frequency of [n] # for [ŋ] #noun, English interview style	Empirical
011	20	.45	Frequency of [ŋ] # noun, English word naming	Empirical
083	27	.41	Frequency of [ŋ] # verb, English word naming	A priori
067	34	.38	Frequency of [ón] #, Spanish paragraph reading	A priori
124	28	.30	Word association, family	A priori

Factor 6: Sociolinguistic Sensitivity

Variable	N	Loading	Score	Type of Score
034	40	.62	Sensitivity to language usage (2nd conversation)	Empirical
072	29	.62	Frequency of [∅]for[s]#, Spanish interview style	A priori
070	41	.54	Frequency of ṽ for v́N, Spanish word naming	A priori
097	42	-.46	Identification of language usage (1st conversation)	Empirical
037	30	-.44	Sensitivity to language usage (4th conversation)	Empirical
045	40	.44	Word frequency estimation, skill	Empirical
030	29	-.43	Spanish human ratio, word association, neighborhood	A priori
039	37	-.43	Listening comprehension, social (implicit) content (5th conversation)	Empirical
036	37	-.39	Listening comprehension, social (implicit) content (4th conversation)	Empirical
29	28	-.38	Spanish word association, religion	Empirical
100	41	-.37	Identification of language usage (4th conversation)	A priori
079	33	.35	Frequency of consonant cluster reduction in second member, English paragraph reading	A priori
038	41	-.33	Listening comprehension (5th conversation)	A priori
065	40	.31	Frequency of[ɾ:] v-v, Spanish word list reading	A priori

Factor 7: Spanish Word Frequency Estimation

Variable	N	Loading	Score	Type of Score
044	40	.68	Word frequency estimation, Spanish	Empirical
112	40	.62	Word frequency estimation, work	A priori
019	15	-.61	Frequency of [ai] C_v, English casual speech	Empirical
110	40	.60	Word frequency estimation, education	A priori
047	40	.59	Word frequency estimation, religion factor score	Empirical
046	40	.50	Word frequency estimation, work factor score	Empirical
113	40	.49	Word frequency estimation, neighborhood	A priori
001	40	-.47	Frequency of [s]C, Spanish paragraph reading	Empirical
075	38	-.46	Frequency of v́N, English word list reading	A priori
009	34	.36	Frequency of[ɔ] , English paragraph reading	Empirical
002	41	-.35	Frequency of[ɾ] C, Spanish word list reading	Empirical
082	40	.31	Frequency of ṽ for v́N, English word naming	A priori

Appendix 2

Alternative Measures of Bilingualism

Joshua A. Fishman and Robert L. Cooper

The Within-Type and Between-Type Intercorrelations of Alternative Measures of Bilingualism

As the foregoing discussion revealed the several measures of bilingualism developed by the Dominance Configuration Project could be viewed in conjunction with three different dichotomous distinctions:

a. Empirical - A priori

b. Performance - Report

c. Proficiency - Usage

With respect to the eight types of measures yielded by the above three dichotomies we can now ask two further questions.

1) Do these distinctions clarify any differences that may obtain insofar as within-type intercorrelations are concerned, i.e., are some types of measures more homogeneous than others and, if so, do differences in homogeneity covary with the dichotomies indicated above?

2) Do these distinctions clarify any differences that may obtain insofar as between-type intercorrelations are concerned, i.e., are some types of measures more unique than others and, if so, do differences in uniqueness covary with the dichotomies indicated above?

Table 8 enables us to answer the first question referred to above. It seems clear that our alternative (self-) report measures are more like each other than are our alternative performance measures and that this is so whether we are speaking of proficiency or of usage

Table 8. Median Within-Type Intercorrelations of Alternative Measures of Bilingualism

	Empirical		A priori	
	Prof.	Usage	Prof.	Usage
Perform.	.21	.23	.16	.18
Report	.43	.31	.61	.41

measures and whether we are considering empirical or a priori measures. However, this is particularly true in connection with a priori measures, and, most particularly, in connection with proficiency a priori measures. In this latter quadrant the intercorrelation coefficient obtained (.61) indicates a great deal more consistency in a priori scores of census replies to questions concerning ability to understand, speak, read or write Spanish and English than obtains on Word Naming, Word Association, Listening Comprehension and Linguistic (Phonological) measures of the same abilities (.16). In general, our respondents seem to have had a more consistent picture of their bilingualism (particularly of their bilingual ability) than that which they actually demonstrated. Self-report measures seem to tap the consistency of individual self-concepts. Performance measures are seemingly superior measures of the variability of individual behavior. Obviously, both kinds of measures are needed.

The other two dichotomies show less regular patterns. In general, a priori measures are more highly intercorrelated than empirical ones but this is not true if we consider performance measures alone. Similarly, proficiency measures are more highly intercorrelated than usage measures but this is again not true if we consider performance measures alone. Thus, the crucial difference with respect to the consistency of alternative measures is between performance and report measures. All other differences (between a priori and empirical measures and between proficiency and usage measures) depend on and interact with the basic difference between performance and report measures.

We turn now to Table 9 in order to answer the second question raised initially. It seems clear in this connection that we are generally dealing with a lower magnitude of between-type intercorrelations than that noted for within-type intercorrelations. In addition, it is also clear that the differences in between-type intercorrelations are too small to merit extensive interpretation. One might safely conclude that if all eight types of measures are of interest then each type needs to be obtained independently since the overlap between types is meager indeed.

Table 9. Median Between-Type Intercorrelations of Alternative Measures of Bilingualism

	Empirical		A priori	
	Prof.	Usage	Prof.	Usage
Perform.	.20	.21	.19	.23
Report	.26	.24	.22	.23

A final word should be said about some of the specific intercorrelations from which the medians shown in Table 9 above were derived. As Table 9 reveals most of these intercorrelations hover in the neighborhood of the low twenties. A very few (six out of 28) rise above this general range into magnitudes in the 30's or higher. As Table 10 reveals, all six of these "higher" intercorrelations (3-4, 3-7, 3-8, 4-7, 4-8, and 7-8) involve the four self-report types of measures in all of their intercorrelations with each other. Thus, it is only in the self-report area that appreciable degrees of common variance may obtain between empirical and a priori or between proficiency and usage measures. In general, however, these are quite different aspects of the measurement and description of bilingualism and deserve to be treated separately in any future research that finds one or another of them to be particularly promising for practical or theoretical reasons.

Part VII

THEORETICAL ADDENDUM

Table 10. Median Intercorrelations of Eight types of Bilingual Measures

	Types							
	1	2	3	4	5	6	7	8
1. Perform-Prof-Empirical	--	18	24	22	19	21	20	20
2. Perform-Prof-A priori		--	22	19	19	18	19	19
3. Report-Prof-Empirical			--	60	21	26	36	44
4. Report-Prof-A priori				--	17	19	35	41
5. Perform-Usage-Empirical					--	26	22	21
6. Perform-Usage-A priori						--	24	23
7. Report-Usage-Empirical							--	32
8. Report-Usage-A priori								--

Chapter
VII-1

SOCIETAL BILINGUALISM: STABLE AND TRANSITIONAL[*]

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Societal bilingualism has been referred to so many times in the previous pages that it is time that we paused to consider it in its own right rather than as a means of illustrating more general sociolinguistic phenomena. The psychological literature on bilingualism is so much more extensive than its sociological counterpart that workers in the former field have often failed to establish contact with those in the latter. It is the purpose of this section to relate these two research traditions to each other by tracing the interaction between their two major constructs: bilingualism (on the part of psychologists and psycholinguists) and diglossia (on the part of sociologists and sociolinguists).

Diglossia

In the few years that have elapsed since Ferguson (1959) first advanced it, the term diglossia has not only become widely accepted by sociolinguists and sociologists of language, but it has been further extended and refined. Initially it was used in connection with a society that recognized two (or more) languages for intrasocietal communication. The use within a single society of several separate codes (and their stable maintenance rather than the displacement of one by the other over time) was found to be dependent on each code's serving functions distinct from those considered appropriate for the other code. Whereas one set of behaviors, attitudes and values supported, and was expressed in, one language, another set of behaviors, attitudes and values supported and was expressed in the other. Both sets of behaviors, attitudes and values were fully accepted as culturally legitimate and complementary (i.e., non-conflictual) and indeed, little if any conflict between them was possible in view of the functional separation between them. This separation was most often along the lines of an H(igh) language, on the one hand, utilized in conjunction with religion, education and other aspects of High Culture, and an L(ow) language, on the other hand, utilized in conjunction with everyday pursuits of hearth, home and lower work sphere. Ferguson spoke of H and L as superposed languages.

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[*] A revision of "Bilingualism with and without diglossia; diglossia with and without bilingualism," Journal of Social Issues, 1967, 23, no. 2, 29-38. In press, as part of a longer chapter on "Sociolinguistics," in Social Psychology, Kurt Back, ed. New York, Wiley, 1968. Preparation of this paper was supported under DHEW Contract No. OEC-1-7-062817-0297.

To this original edifice others have added several significant considerations. Gumperz (1961, 1962, 1964a, 1964b, 1966) is primarily responsible for our greater awareness that diglossia exists not only in multilingual societies which officially recognize several "languages," and not only in societies that utilize vernacular and classical varieties but, also, in societies which employ separate dialects, registers, or functionally differentiated language varieties of whatever kind. He has also done the lion's share of the work in providing the conceptual apparatus by means of which investigators of multilingual speech communities seek to discern the societal patterns that govern the use of one variety rather than another, particularly at the level of small group interaction. Fishman (1964, 1965a, 1965c, 1965d, 1965e, 1966a, 1968), on the other hand, has attempted to trace the maintenance of diglossia as well as its disruption at the national or societal level. In addition he has attempted to relate diglossia to psychologically pertinent considerations such as compound and coordinate bilingualism (1965b). The present section represents an extension and integration of these several previous attempts.

For purposes of simplicity it seems best to represent the possible relationships between bilingualism and diglossia by means of a four-fold table such as that shown in Figure 1.

Speech communities characterized by both diglossia and bilingualism

The first quadrant of Figure 1 refers to those speech communities in which both diglossia and bilingualism are widespread. At times such communities comprise an entire nation, but of course this requires extremely widespread (if not all-pervasive) bilingualism and, as a result, there are really few nations that are fully bilingual and diglossic. An approximation to such a nation is Paraguay, where more than half of the population speaks both Spanish and Guaraní (Rubin 1962, 1968). A substantial proportion of the formerly monolingual rural population has added Spanish to its linguistic repertoire in connection with matters of education, religion, government, and High Culture (although in the rural areas social distance or status stressing more generally may still be expressed in Guaraní). On the other hand, the vast majority of city dwellers (being relatively new from the country) maintain Guaraní for matters of intimacy and primary group solidarity, even in the midst of their more newly acquired Spanish urbanity (see Figure 2). Note that Guaraní is not an "official" language (i.e., recognized and utilized for purposes of government, formal education, the courts, etc.) in Paraguay, although it was finally recognized as a "national language" at the 1967 constitutional convention. It is not uncommon for the H variety alone to be recognized as "official" in diglossic settings without this fact threatening the acceptance or the stability of the L variety within the speech community. However, the existence of a single "official" language should not divert the investigator from recognizing the fact of widespread and stable multilingualism at the levels of societal and interpersonal functioning. (See Table 1)

Figure 1: The Relationships between Bilingualism and Diglossia

	DIGLOSSIA	
BILINGUALISM	+	-
+	1. Both diglossia and bilingualism	2. Bilingualism without diglossia
-	3. Diglossia without bilingualism	4. Neither diglossia nor bilingualism

Below the level of nationwide functioning there are many more examples of stable diglossia co-occurring with widespread bilingualism. The Swiss-German cantons may be mentioned since their entire population of school age and older alternates between High German (H) and Swiss German (L), each with its own firmly established and highly valued functions (Ferguson 1959; Weinreich, U. 1951, 1953). Traditional (pre-World War I) Eastern European Jewish males communicated in Hebrew (H)

Figure 2

National Bilingualism in Paraguay

Ordered dimensions in the choice of language in a diglossic society

(Joan Rubin 1968)

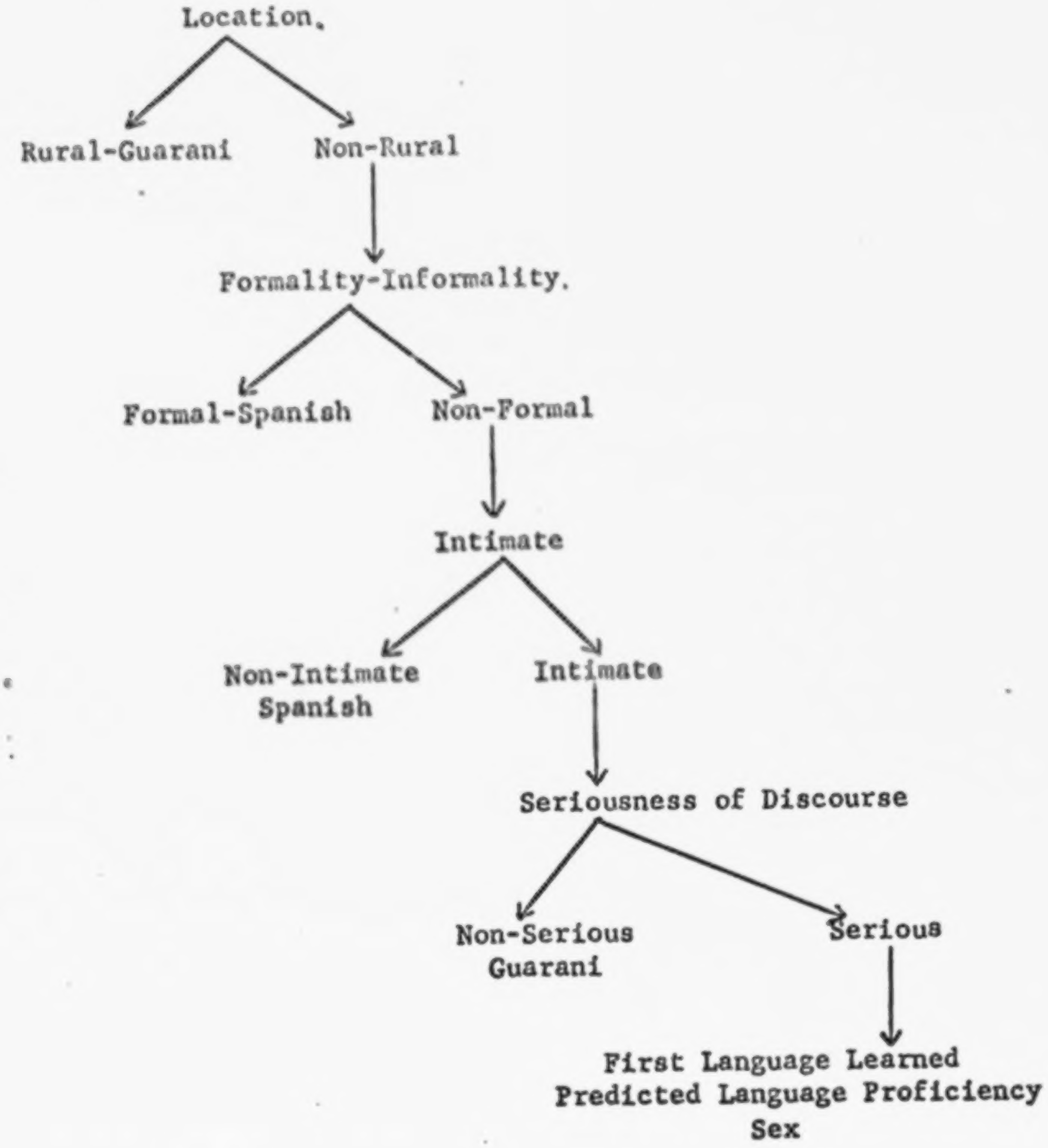
Location.
Rural-Guarani
Non-Rural
Formality-Informality.
Formal-Spanish
Non-Formal
Intimate
Non-Intimate
Spanish
Intimate
Seriousness of Discourse
Non-Serious
Guarani
Serious
First Language Learned
Predicted Language Proficiency
Sex

Table 1

Linguistic Unity and Diversity, by World Region

(Rustow 1967)

Region	No. of Countries by Percent of Population Speaking Main Language									
	90-100	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	Total 10-100%
Europe	17	4	2	2	2	---	---	---	---	27
East and South Asia	5	3	4	3	1	4	---	1	---	21
Oceania[a]	2	---	---	---	---	---	---	---	---	2
Middle East and Northern Africa	8	6	2	3	1	2	---	---	---	22
Tropical and Southern Africa	3	---	---	2	5	8	7	5	3	33
The Americas	15	6	---	---	2	2	1	---	---	26
World Total	50	19	8	10	11	16	8	6	3	131

[a] Not including New Guinea, for which no breakdown by individual language was available.

and Yiddish (L). In more recent days many of their descendents have continued to do so in various countries of resettlement, even while adding to their repertoire a Western language (notably English) in certain domains of _intragroup_ communication as well as for broader _intergroup_ contacts (Fishman 1965a, 1965e; Weinreich, U. 1953; Weinreich, M. 1953). This development differs significantly from the traditional Eastern European Jewish pattern in which males whose occupational activities brought them into regular contact with various strata of the non-Jewish coterritorial population utilized one or more coterritorial languages (which involved H and L varieties of their own, such as Russian, German or Polish, on the one hand, and Ukrainian, Byelorussian or "Baltic" varieties, on the other), but did so for _intergroup_ scientific or technological communication (Blanc 1964; Ferguson 1959; Nader 1962).

All of the foregoing examples have in common the existence of a fairly large and complex speech community such that its members have available to them both a range of _compartmentalized_ roles as well as ready _access_ to these roles. If the _role repertoires_ of these speech communities were of lesser range, then their _linguistic repertoires_ would also be(come) more restricted in range, with the result that one or more separate languages or varieties would be(come) superfluous. In addition, were the roles not compartmentalized, i.e., were they not _kept separate_ by dint of association with quite separate (though complementary) values, domains of activity and everyday situations, one language (or variety) would displace the other as role and value distinctions merged and became blurred. Finally, were widespread access not available to the range of compartmentalized roles (and compartmentalized languages or varieties) then the bilingual population would be a small, privileged caste or class (as it is or was throughout most of traditional India or China) rather than a broadly based population segment.

These observations must lead us to the conclusion that many modern speech communities that are normally thought of as monolingual are, rather, marked by both diglossia and bilingualism, if their several registers are viewed as separate varieties or languages in the same sense as the examples listed above. Wherever speech communities exist whose speakers engage in a considerable range or roles (and this is coming to be the case for all but the extremely upper and lower levels of complex societies), wherever access to several roles is encouraged or facilitated by powerful social institutions and processes, and finally, wherever the roles are clearly differentiated (in terms of when, where and with whom they are felt to be appropriate), both diglossia and bilingualism may be said to exist. The benefit of this approach to the topic at hand is that it provides a single theoretical framework for viewing bilingual speech communities and speech communities whose linguistic diversity is realized through varieties not (yet) recognized as constituting separate "languages". Thus, rather than becoming fewer in modern times, the number of speech communities characterized by diglossia and the widespread command of diversified linguistic repertoires has increased greatly as a consequence of modernization and growing social complexity (Fishman 1966b). In such communities each generation begins anew on a monolingual or restricted repertoire base of hearth and home and must be rendered bilingual or provided with a fuller repertoire by the formal institutions of education, religion, government or the work sphere. In diglossic-bilingual speech communities children do not attain their full repertoires at home or in their neighborhood playgroups. Indeed, those who most commonly remain at home or in the home neighborhood (the pre-school young and the post-work old) are most likely to be functionally monolingual as Lieberson's tables on French-English bilingualism in Montreal amply reveal (see Table 2).

Diglossia without bilingualism

Departing from the co-occurrence of bilingualism and diglossia we come first to polities in which diglossia obtains whereas bilingualism is generally absent (quadrant 3). Here we find two or more speech communities united politically, religiously and/or economically into a single functioning unit notwithstanding the socio-cultural cleavages that separate them. At the level of this larger (but not always voluntary) unity, two or more languages or varieties must be recognized as obtaining. However one (or both) of the speech communities involved is (are) marked by relatively impermiable group boundaries such that for "outsiders" (and this may well mean all those not born into the speech community, i.e., an emphasis on ascribed rather than on achieved status) role access and linguistic access are severely restricted. At the same time linguistic repertoires in one or both groups are limited due to role specialization.

Examples of such situations are not hard to find (see, e.g., the many instances listed by Kloss 1966). Pre-World War I European elites often stood in this relationship with their countrymen, the elites speaking French or some other fashionable H tongue for their intra-group purposes (at various times and in various places:

Table 2

Percentage Bilingual, by Age and Sex, Montreal Area, 1931-61

(Lieberson 1965)

Age	Males					Females				
	Montreal-Verdun		Montreal-Outremont-Verdun			Montreal-Verdun		Montreal-Outremont-Verdun		
	1931 (1)	1941 (2)	1941 (3)	1951 (4)	1961 (5)	1931 (6)	1941 (7)	1941 (8)	1951 (9)	1961 (10)
0- 4	4.1	5.7	5.7	3.3	2.5	4.0	5.6	5.7	3.4	2.5
5- 9	18.2	11.3	11.5	9.7	9.9	18.0	11.5	11.8	9.7	9.6
10-14	43.4	22.2	22.6	20.5	22.4	41.4	21.9	22.3	20.1	21.9
15-19	62.4	51.4	51.7	50.6	49.6	54.7	43.1	43.5	44.5	46.7
20-24	67.2	67.1	67.2	64.9	59.4	53.3	51.5	51.7	48.2	44.4
25-34	61.9	68.8	68.8	68.8	59.7	49.0	47.8	48.1	47.8	41.1
35-44	62.2	63.6	63.7	68.1	65.3	44.5	40.9	41.2	45.2	45.5
45-54	59.3	60.3	60.3	62.7	63.6	41.6	35.6	36.0	37.4	42.6
55-64	57.4	53.7	53.8	57.3	57.2	37.1	31.2	31.6	30.8	34.5
65-69	56.4	49.4	49.6	49.7	52.0	34.3	28.0	28.5	26.5	28.5
70+	51.2	42.9	43.3	42.2	44.0	31.2	24.4	24.7	23.5	24.5

Danish, Salish, Provencal, Russian, etc.) and the masses speaking another, not necessarily linguistically related, language for their intra-group purposes. Since the majority of elites and the majority of the masses never interacted with one another they did not form a single speech community (i.e., their linguistic repertoires were discontinuous) and their inter-communications were via translators or interpretors (a certain sign of intra-group monolingualism). Since the majority of the elites and the majority of the masses led lives characterized by extremely narrow role repertoires their linguistic repertoires too were too narrow to permit widespread societal bilingualism to develop. Nevertheless, the body politic in all of its economic and national manifestations tied these two groups together into a "unity" that revealed an upper and a lower class, each with a language appropriate to its own restricted concerns. Some have suggested that the modicum of direct interaction that does occur between servants and masters who differ in mother tongue brings into being the marginal languages (pidgins) for which such settings are known.

Thus, the existence of national diglossia does not imply widespread bilingualism amongst rural or recently urbanized African groups (as distinguished from somewhat more Westernized populations in those settings); nor amongst most lower caste Hindus, as distinguished from their more fortunate compatriots the Brahmins; nor amongst most lower class rural French-Canadians, as distinguished from their upper and upper middle class city cousins, etc. In general, this pattern is characteristic of polities that are economically underdeveloped and unmobilized, combining groups that are locked into opposite extremes of the social spectrum and, therefore, groups that operate within extremely restricted and discontinuous linguistic repertoires (Friederich 1962). Obviously, such polities are bound to experience language problems as their social patterns alter in the direction of industrialization, widespread literacy and education, democratization, and modernization more generally. Sicce few polities that exhibit diglossia without bilingualism developed out of prior socio-cultural consensus or unity, any educational, political or economic development experienced by their lower classes is likely to lead to secessionism or to demands for equality for their submerged language(s). The linguistic states of Eastern Europe and India, and the language problems of Wales, Canada and Belgium stem from origins such as these. This is the pattern of development that may yet convulse modern West African nations if their de-ethnicized Westernized elites continue to fail to foster widespread and stable bilingual speech communities that incorporate the masses and that recognize both the official language of wider communication and the local languages of hearth and home.

Bilingualism without diglossia

We turn next to those situations in which bilingualism obtains whereas diglossia is generally absent (quadrant 2). Here we see even more clearly than before that bilingualism is essentially a characterization of individual linguistic versatility whereas diglossia is a characterization of the societal allocation of functions to different languages or varieties. Under what circumstances do bilinguals function without the benefit of a well understood and widely accepted social consensus as to which language is to be used between which interlocutors, for communication concerning what topics or for what purposes? Under what circumstances do the varieties or languages involved lack well defined or protected separate functions? Briefly put, these are circumstances of rapid social change, of great social unrest, of widespread abandonment of prior norms before the consolidation of new ones. Children typically become bilingual at a very early age, when theyare still largely confined to home and neighborhood, since their elders (both adults and school aged) carry into the domains of intimacy a language learned outside its confines. Formal institutions tend to render individuals increasingly monolingual in a language other than that of hearth and home. Ultimately, the latter replaces the former (see Tables 3 and 4).

Many studies of bilingualism and intelligence or of bilingualism and school achievement have been conducted within the context of bilingualism without diglossia (for a review see Macnamara 1966), often without sufficient understanding on the part of investigators that this was but one of several possible contexts for the study of bilingualism. As a result, many of the purpoted "disadvantages" of bilingualism have been falsely generalized to the phenomenon at large rather than related to the absence or presence of social patterns which reach substantially beyond bilingualism (Fishman 1965b, 1966a).

The history of industrialization in the Western world (as well as in those parts of Africa and Asia which have experienced industrialization under Western "auspices") is such that the means (capital, plant, organization) of production have often been controlled by one speech community while the productive manpower was drawn from another (Deutsch 1966). Initially, both speech communities may have main-

Table 3

Frequency of Mother Tongue Use in Conversations by Oldest and Youngest Children of Four Ethnic Backgrounds*

(Fishman 1966c)

In conversation with:	German						Jewish						Polish						Ukrainian					
	Almost Always		Frequently		Almost Never		Almost Always		Frequently		Almost Never		Almost Always		Frequently		Almost Never		Almost Always		Frequently		Almost Never	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Grandparents	6	26.1	6	26.1	11	47.8	6	20.0	9	30.0	15	50.0	15	57.6	5	19.2	6	23.2	26	96.3	--	--	1	3.7
Father	7	18.4	10	26.4	21	55.2	5	15.0	23	34.3	34	50.7	22	38.3	17	26.7	21	35.0	42	84.0	6	12.0	2	4.0
Mother	5	16.1	4	12.9	22	71.0	5	9.8	19	37.4	27	52.9	16	29.1	14	25.4	25	45.5	41	89.1	5	10.9	--	--
Brothers and sisters	2	8.7	2	8.7	19	82.6	--	--	7	18.9	30	81.1	7	19.4	5	13.8	24	66.7	20	50.0	18	45.0	2	5.0
Friends	3	10.0	7	23.3	20	66.7	--	--	10	22.7	34	77.3	4	9.8	9	21.9	28	68.3	15	27.3	20	36.4	20	36.4
Husband and wife	2	11.1	1	5.6	15	83.3	--	--	1	4.5	21	95.5	3	15.0	--	--	17	85.0	4	36.4	3	27.3	4	36.4
Own child	1	5.6	3	16.7	14	77.8	--	--	1	5.3	18	94.7	3	20.0	--	--	12	80.0	4	50.0	3	37.5	1	12.5

*Data reported by parents. The German and Polish parents studied were primarily second generation individuals. The Jewish and Ukrainian parents studied were primarily first generation individuals. All parents were ethnic cultural or organizational "leaders."

Table 4

1940-1960 Totals for 23 Non-English Mother Tongues in the USA

(Fishman 1966c)

Language	1940 Total	1960 Total	Total Change n	Total Change %
Norwegian	658,220	321,774	-336,446	-51.1%
Swedish	830,900	415,597	-415,303	-50.0%
Danish	226,740	147,619	- 79,121	-65.1%
Dutch/Flemish	289,580	321,613	+ 32,033	+11.1%
French	1,412,060	1,043,220	-368,840	-26.1%
German	4,949,780	3,145,772	-1,804,008	-36.4%
Polish	2,416,320	2,184,936	-231,384	- 9.6%
Czech	520,440	217,771	-302,669	-58.2%
Slovak	484,360	260,000	-224,360	-46.3%
Hungarian	453,000	404,114	- 48,886	-10.8%
Serbo-Croatian	153,080	184,094	+ 31,014	+20.3%
Slovenian	178,640	67,108	-111,532	-62.4%
Russian	585,080	460,834	-124,246	-21.2%
Ukrainian	83,600	252,974	+169,374	+202.6%
Lithuanian	272,680	206,043	- 66,637	-24.4%
Finnish	230,420	110,168	-120,252	-52.2%
Rumanian	65,520	58,019	- 7,501	-11.4%
Yiddish	1,751,100	964,605	-786,495	-44.9%
Greek	273,520	292,031	+ 18,511	+ 6.8%
Italian	3,766,820	3,673,141	- 93,679	- 2.5%
Spanish	1,861,400	3,335,961	+1,474,561	+79.2%
Portuguese	215,660	181,109	- 34,551	-16.0%
Arabic	107,420	103,908	- 3,512	- 3.3%
Total	21,786,540	18,352,351	-3,434,189	-15.8%

In 1940 the numerically strongest mother tongues in the United States were German, Italian, Polish, Spanish, Yiddish, and French, in that order. Each of these languages was claimed by approximately a million and a half or more individuals. In 1960 these same languages remained the "big six" although their order had changed to Italian, Spanish, German, Polish, French, and Yiddish. Among them, only Spanish registered gains (and substantial gains at that) in this 20-year interval. The losses among the "big six" varied from a low of 2.5% for Italian to a high of 44.9% for Yiddish. The only other languages to gain in overall number of claimants during this period (disregarding the generational distribution of such gains) were Ukrainian, Serbo-Croatian, "Dutch"/Flemish, and Greek. The greatest gain of all was that of Ukrainian (202.6%!). Most mother tongues, including five of the "big six," suffered substantial losses during this period, the sharpest being that of Danish (65.1%). All in all, the 23 non-English mother tongues for which a 1940-1960 comparison is possible lost approximately one-sixth of their claimants during this interval. Yet the total number of claimants of non-English mother tongues in the United States is still quite substantial, encompassing nearly 11% of the total 1960 population (and an appreciably higher proportion of the white population).[6]

Table 4 (continued)

[6] The 1940 and 1960 totals shown in Table 4 must not be taken as the totals for all non-English mother tongue claimants in those years. Figures for Armenian were reported in 1940 but not in 1960. Figures for Chinese and Japanese were reported in 1960 but not in 1940. Total figures for "All other" languages were reported in both years. None of these inconsistent or non-specific listings are included in Table 4. Adding in these figures, as well as the necessary generational estimates based upon them, the two totals would become 1940: 22,036,240; 1960: 19,381,786.

tained their separate diglossia-with-bilingualism patterns or, alternatively, that of an overarching diglossia without bilingualism. In either case, the needs as well as the consequences of rapid and massive industrialization and urbanization were frequently such that members of the speech community providing productive manpower rapidly abandoned their traditional socio-cultural patterns and learned (or were taught) the language associated with the means of production much earlier than their absorption into the socio-cultural patterns and privileges to which that language pertained. In response to this imbalance some react(ed) by further stressing the advantages of the newly gained language of education and industry while others react(ed) by seeking to replace the latter by an elaborated version of their own largely pre-industrial, pre-urban, pre-mobilization tongue.

Under circumstances such as these no well established, socially recognized and protected functional differentiation of languages obtains in many speech communities of the lower and lower middle classes. Dislocated immigrants and their children (for whom a separate "political solution" is seldom possible) are particularly inclined to use their mother tongue and other tongue for intra-group communication in seemingly random fashion (Fishman, Cooper and Ma 1968; Nahirny and Fishman 1965; Herman 1961). Since the formerly separate roles of the home domain, the school domain and the work domain are all disturbed by the massive dislocation of values and norms that result from simultaneous immigration and industrialization, the language of work (and of the school) comes to be used at home. As role compartmentalization and value complementarity decrease under the impact of foreign models and massive change the linguistic repertoire also becomes less compartmentalized. Languages and varieties formerly kept apart come to influence each other phonetically, lexically, semantically and even grammatically much more than before. Instead of two (or more) carefully separated languages each under the eye of caretaker groups of teachers, preachers and writers, several intervening varieties may obtain differing in degree of interpenetration. Under these circumstances the languages of immigrants may come to be ridiculed as "debased" and "broken" while at the same time their standard varieties are given no language maintenance support.

Thus, bilingualism without diglossia tends to be transitional both in terms of the linguistic repertoires of speech communities as well as in terms of the speech varieties involved per se. Without separate though complementary norms and values to establish and maintain functional separation of the speech varieties, that language or variety which is fortunate enough to be associated with the predominant drift of social forces tends to displace the other(s). Furthermore, pidginization (the crystalization of new fusion languages or varieties) is likely to set in when members of the "work force" are so dislocated as not to be able to maintain or develop significantly compartmentalized, limited access roles (in which they might be able to safeguard a stable mother tongue variety), on the one hand, and when social change stops short of permitting them to interact sufficiently with those members of the "power class" who might serve as standard other-tongue models, on the other hand.

Neither diglossia nor bilingualism

Only very small, isolated and undifferentiated speech communities may be said to reveal neither diglossia nor bilingualism

(Gumperz 1962; Fishman 1965c). Given little role differentiation or compartmentalization and frequent face-to-face interaction between all members of the speech community, no fully differentiated registers or varieties may establish themselves. Given self-sufficiency, no regular or significant contacts with other speech communities may be maintained. Nevertheless, such groups--be they bands or clans--are easier to hypothesize than to find (Owens 1965; Sorensen 1967). All speech communities seem to have certain ceremonies or pursuits to which access is limited, if only on an age basis. Thus, all linguistic repertoires contain certain terms that are unknown to certain members of the speech community, and certain terms that are used differently by different sub-sets of speakers. In addition, metaphorical switching for purposes of emphasis, humor, satire or criticism must be available in some form even in relatively undifferentiated communities. Finally, such factors as exogamy, warfare, expansion of population, economic growth and contact with others all lead to internal diversification and, consequently, to repertoire diversification. Such diversification is the beginning of bilingualism. Its societal normification is the hallmark of diglossia. Quadrant four tends to be self-liquidating.

Conclusions

Many efforts are now underway to bring to pass a rapprochment between psychological, linguistic and sociological work on bilingualism. The student of bilingualism, most particularly the student of bilingualism in the context of social issues and social change, should benefit from an awareness of the various possible relationships between individual bilingualism and societal diglossia illustrated in this section.

One of the fruits of such awareness will be that problems of transition and dislocation will not be mistaken for the entire gamut of societal bilingualism.

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Chapter
VII-2

SOCIOLINGUISTIC PERSPECTIVE ON THE STUDY OF BILINGUALISM*[1]

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Investigators from three different disciplinary traditions have devoted appreciable attention to bilingualism. Unfortunately, each of these three (psychology,[2] linguistics and sociology) has normally conducted its work in isolation from the other. As a result, not only have the methods stemming from one discipline been unexamined by investigators associated with the others but there has been insufficient concern for integrating the particular aspects of reality that each of these disciplines recognizes into a single, inclusive theory of bilingual behavior. The current presentation is, therefore, divided into two parts. The first part consists of brief reviews and critiques of most efforts in traditional approaches to the study of bilingualism in each of the three separate disciplines. The second consists of an attempt to suggest an integrated (inter-disciplinary) theory for the study of bilingualism.

I. Traditional Disciplinary Approaches to the Study of Bilingualism: Psychology, Linguistics and Sociology.

1. Psychological inquiry into bilingualism

Psychological research on bilingualism has most frequently been conducted as a by-product of concern with either the educability or the educational achievement of bilingual children.[3] As a result, there is a huge psycho-educational literature on the relationship of bilingualism to intelligence and school learning (see, e.g., Anon. 1960; Anon. 1965; Darcy 1953; Haugen 1956; Macnamara 1966; Weinreich 1963), whereas the psychological literature on bilingualism per se, although still extensive, is more meager than that which is oriented toward educational needs and problems. Paralleling this imbalance (and, perhaps, as a result thereof) is the fact that psychological studies of bilingualism have neither yielded an explicit model of bilingual functioning nor have they revealed the same componential sophistication as has been shown in connection with psychological exploration of other behaviors. Thus, while the study of memory or perception, on the one hand, or the study of cognition and intelligence, on the other, have all undergone increasing refinement in recent years, the psychological study of bilingualism has tended to retain the view that bilingualism is basically best understood as a single, unified, unvarying[4] "capacity" or "competence" (which may be tapped via various alternative ways or "performances").

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*In press, _Linguistics_, 1968.

As a result of cumulative theory and research extending over several years psychologists are now largely no longer interested in "general intelligence per se" but in various kinds or manifestations of intelligence, as well as in various factors that heighten or depress the realization of aptitude for problem solving, divergent thinking, convergent thinking, etc. Thus the study of intelligence has been both componentialized (differentiated) and contextualized. While some psychologists may lament the fact that global intelligence as such has "disappeared" (McNemar 1964) most realize that what has taken its place is actually a much more sophisticated (sensitive, versatile) view of the matter (Hunt 1961). If "general intelligence" still remains of interest to some advanced workers in this field they realize that it is a generalization that depends, for any value it may have, on a better understanding of its manifold components and expressions than has hitherto been available. Thus, the fractionization of general intelligence has produced a far richer model of cognitive functioning as a whole and of its interaction with motivational and social variables.

Essentially similar developments have marked recent psychological work on memory, perception and other cognitive as well as affective processes. Influences that had hitherto been consigned to the realm of error variance have come to be recognized in their own right as vital parameters of the phenomenon under investigation. What had originally been viewed as basically pure, underlying capacities have come to be viewed much more excitingly as inextricably interactional processes. Thus, while the distinction between competence (capacity) and performance (behavioral realization) is commonly retained in psychology it is generally understood that neither can be grasped without the other. The psychologist's concern for theoretical parsimony necessarily introduces a quality of abstractness and artificiality into his notions of both competence and performance. As with all scientists, his task is to work with abstractions and, simultaneously, to transcend or enrich them. This entire progression toward greater componentialization, contextualization and competence-performance interaction is absent from most psychological work on bilingualism. Psychological research on bilingualism would undoubtedly benefit from theories of performance that are sensitive to parameters of the natural interaction between bilingual interlocutors.

The foregoing is not to say that psychological work on bilingualism reveals no internal differentiation, for it does. However, this differentiation is primarily methodological (in terms of data collection and analysis) rather than conceptual. As a result, the methodological differences are often difficult to evaluate since they seem not to be related to any broader theoretical differences with respect to a model of bilingual behavior. This can be illustrated by reference to the extensive body of psychological research on bilingualism that depends directly or indirectly upon the notion of speed (although any one of several other methodological artifacts could be utilized for this purpose). The primitive model involved is undoubtedly one that posits greater strength, competence or mastery ("control") of a language the more automatically one can use it. Within the framework of this reliance upon speed or time as an expression of competence psychologists have collected many different kinds of data. Among the indirect time-measures employed (i.e., measures that recognize fluency, or productivity via time-dependency) psychologists have counted the number of words their subjects have produced in response to a particular stimulus (Ervin 1954; Lambert 1955; Lambert 1956; Lambert 1959; Szalay 1966), or the number of words they have been able to pick out or recognize from a jumbled or ambiguous field (Lambert 1959; Peal and Lambert 1962).[5] Among the direct time-measures employed (where speed as such is the basic datum) psychologists have examined how soon their Ss have correctly reported words exposed for very brief periods of time (Lambert 1959), or how quickly they have been able to respond to instructions (Lambert 1955; Lambert 1959). These and several other types of speed-related measures (e.g., Ervin 1961a; Ervin 1961b; Lambert and Preston 1965) have at times been intercorrelated and even factor-analyzed without any explicit theory as to the significance of speed or speededness as an index of or component of bilingualism, or of verbal interaction in general. Furthermore, very little explicit empirical validation has been attempted of the relationship between speed or speededness and bilingual proficiency more naturalistically or more exhaustively defined. (For a few partial exceptions see Lambert 1955, Ervin 1961a, 1961b; although correlations with self-report inventories do not strike me as offering the most convincing proof of the need for speed-based measures.)

To the sociologist or social anthropologist speed appears to be an exceedingly odd if not spurious measure of bilingualism. It would seem that in bending over to find a pure, socio-culturally uncontaminated measure of "basic" bilingual capacity psychologists have unwittingly seized upon one that is peculiarly ethnocentric at best. Where there is no actual or perceived merit in speaking or reacting quickly or automatically (i.e., where speed of response is not indicative of intimacy, emotion, lack of time or other speech community regularity) there would seem to be no scientific merit in measuring bilingual proficiency by reference to speech.[6] This observation would seem to apply quite analagously to the recurring finding that translation speed is not related to other realizations of bilingualism. Where bilingualism is socially structured on an intra-group basis (rather than when it is merely an individual's occupation or hobby) very little translation occurs. Indeed, the more thoroughly and fully bilingual a society the less need for translation. Thus, translating speed would seem to be a recalcitrant measure of bilingual proficiency precisely because it is unrelated to natural, socially patterned bilingual proficiency. Indeed, it seems strange to a sociolinguist that so much psychological measurement of bilingualism has been attempted without prior investigation of what bilinguals actually do with or via their bilingualism. This is not a self-evident matter that can be left to take care of itself. It is basic to the definition of bilingualism and to the selection of measures to describe it.

Psychologists tend toward the view that their measures of bilingualism are context free (i.e., unrelated to circumstances influencing verbal performance in any given language, such as speed pressures, motivation, social class, education, interlocutor relationships, etc.) because they are "difference scores", derived by subtracting a score (for fluency, e.g.) on language A from the score (for fluency) on language B. While this view is technically defensible as long as it is correct to assume that these contextual factors are equally present in the score for each language (an assumption which must be questioned very seriously), it leaves outside of the psychologist's purview those very matters which are at the heart of performance and orients him even more in the direction of "residual" capacity. As a result, the impact of speededness on bilingual proficiency remains largely unexplored, just as do most other contextual factors. In addition, difference scores leave much to be desired in the purely methodological realm of reliability, so much so that individual measures cannot be trusted and group scores alone are utilized.

The current psychological model of bilingualism is not only non-componential, non-contextual and highly dependent on speech (i.e., on the number of items--usually discrete words--produced or recognized in a specified period of time[7]) but it compounds the notion of "pure" proficiency with that of "dominance" via the notion of "balance." A bilingual who produces equally "well" (equally much per unit time or equally automatically) in each language is said to be a "balanced" bilingual, that is, to be equally proficient in each language. On the other hand, a bilingual who produces more or more rapidly in language X than in Y is said to be an X-"dominant" bilingual. However, this usage makes it exceedingly cumbersome to deal with those bilinguals whose dominant (i.e., most used) language is not their most proficient language or, as is even more common, to refer to those bilinguals whose proficiency is roughly equivalent in both languages but for whom one is clearly dominant over the other, eitherin toto or in definite domains of behavior. The notion of "balance" seems to carry the psychological measurement of bilingualism one step further away from reality. For, instead of asking when and why and how bilinguals actually use their languages it asks whether they can be "tipped" in one direction or another, whether they are "more basically" X speakers or Y speakers. If proficiency per se, as performance-free competence, is hardly a realistic notion, then the notion of "balance" (or of "dominance" viewed as lack of balance) would seem to be even less so. This is so precisely because socially patterned bilingualism can exist as a stabilized phenomenon only if there is functional differentiation between two languages rather than either global dominance or balance. From the point of view of sociolinguistics any society that produces functionally balanced bilinguals (i.e., bilinguals who use both their languages equally and equally well in all contexts) must soon cease to be bilingual since no society needs two languages for one and the same set of functions.

In short, most psychological research on bilingualism seems limited in most respects but the purely quantitative. It has had little to say about the phenomenon with which it deals in terms that are simultaneously integrative, illuminating and socially meaningful. Without explicit ties to a model of cognitive functioning on the one hand and without explicit ties to a model of societal patterning on the other, most psychological work on bilingualism seems to have remained theoretically where it was a decade ago while the work done by its disciplinary neighbors on whom it could lean has moved toward greater complexity and refinement.

2. Linguistic inquiry into bilingualism

If psychological research on bilingualism has been mesmerized by the pursuit of a non-existing entity (non-componentialized, non-contextualized, "pure" bilingual capacity) most traditional linguistic research on bilingualismhas followed an equally unreal course. This course has but two basic notions to it, the first being that of two "pure" languages and the second, that of "interference" between them.

There is substantial similarity between the classical psychological notion of bilingual capacity and the classical linguistic notion of language. Since de Saussure's inspired distinction between langue and parole over three score years ago traditional linguistics has unfortunately become mesmerized by the task of deriving the former (the basic, underlying, pure structure of a language) although working exclusively with data at the level of the latter (the more variable, less fully formed utterances of informants). Thus, both the psychologist's notion of bilingual competence or capacity and the traditional linguist's notion of language structure run a similar risk--the risk of overly early abstraction from reality-data (performance, parole), with the result that significant parameters of the phenomenon actually being studied may be slighted or over-looked. The linguist's traditional view of his task in the area of bilingualism is a perfect example of such overly early abstraction.

The linguist has traditionally viewed bilingualism as "languages in contact" (Weinreich 1953 [1963]), that is, as the interaction between two entities that normally exist in a pure and unsullied state and that have been brought into unnatural contact with each other. Thus, the linguist's traditional model of bilingualism is like the psychologist's in yet another way, that is, he views the natural state of affairs as being "one group, one language" and, therefore, thinks of bilingualism as reflecting inter-group ("between group") interaction rather than intra-group (within-group) functional structural processes. Finally, the linguist has traditionally seen his task, in relation to the study of bilingualism, to be similar to that of a housewife looking for smears of wet paint. He asks: what (phonetic, lexical or grammatical) structures of language X have rubbed off on language Y and vice versa (Haugen 1953, 1956; Mackey 1965, 1966)?

From the point of view of sociolinguistics, however, it must be (and has been) asked whether the initial fiction of a single underlying structure for a language is a worthwhile one. In pursuing it, even in the monolingual case, much "free variation" has had to be left as such, i.e., as unexplained and presumably random fluctuation in pronunciation, grammar or word choice. Subsequently, sociolinguistically sensitive analyses have discovered that much of this variation was not free at all but, rather, that it corresponded to highly patterned ("structured") usage by particular subpopulations of speakers (existing as coterritorial speech communities) or by such speakers in particular situations[8] and with particular purposes in mind (see, e.g., Blanc 1964; Blom and Gumperz 1966; Gumperz and Naim 1960; Gumperz 1961, 1962, 1964a, 1964b, 1966; Hymes 1962; Joos 1959; Labov 1964; Sawyer 1965--for a variety of writings pointing in this general direction, sometimes more so than the authors themselves have cared to admit). As a result of such discoveries and re-discoveries during the past few years, some linguists have not only come to ask whether a structural dialectology is possible (Weinreich 1954) but have gone on beyond dialects (language differences related to "user" differences, usually in terms of geographical spread or origin) to the structural study of registers (language differences related to "use" differences, usually in terms of topic and purpose of interaction [Halliday 1964]) and to the study of superposed varieties of whatever kind. Thus, the initial notion of an unsullied and unvarying langue (valuable though it doubtlessly was and still is) has come to be increasingly componentialized and contextualized.[9] Therefore, if the fiction of a single monolithic language has proved to be less than universally useful, it seems quite obvious why the fiction of "interference" between two such languages has also left much to be desired.

If the starting point for the linguistic study of bilingualism were something real, namely a bilingual speech community such as is highlighted by sociolinguists in several of the studies listed above, rather than something unreal (such as two pure and distinct "languages" that happen to be in contact) the linguist's task would be an altogether more reasonable one, namely, to determine the structures of the several speech varieties that coexist within the bilingual speech community. As a result of such study the linguist _might_ find a variety X and another variety Y and, _very possibly_, x_1y_1, x_2y_2, ... x_ny_n, each with a definite structure and each utilized by a particular subset of speakers in particular situations and for particular purposes. However, all subsets of speakers need not be completely discontinuous (although some may well be), so that some of the same speakers _may_ be encountered in _all_ subsets, some may be encountered in many subsets, some may be encountered only in a few subsets, and others may be encountered only in one. Those subsets characterized by speakers who participate in a wide array of other subsets may well reveal linguistic manifestations of this repertoire range. Thus, it is not so much languages that are in contact with each other as subsets of individuals whose patterned social behavior is such that their verbal repertoire comes to reveal certain characteristics. Different _social_ patterns can be utilized to provide good clues as to the existence of differential bilingual patterns and vice versa.

It is particularly unfortunate that most linguists have come to refer to the language of bilinguals as revealing "interference" since this term has a pejorative (disruptive) connotation that a truly impartial science would have avoided. Linguistics, however, has not been truly impartial to the language of bilinguals. The underlying model of pure, monolithic _langue_ leads the linguist to assume that the interaction or fusion of two such is "interference", that is, deleterious, harmful, noxious. Had this not been the case, i.e., had the language repertoire of bilingual speech communities really been approached in an unbiased fashion, there would be no need for a term such as "interference" since there would be no preference for purity. In most respects bilinguals are people like other people. Like other people they constitute speech communities characterized by certain general social patterns of rights, obligations, daily rounds and interactions. Like other speech communities, those of bilinguals are further analyzable into various partially overlapping subsets of socially recognized aggregates. The members of these aggregates utilize varieties of talk which may be assumed to have definite structure at the usual levels of analysis. Since these structures are unknown the linguist should proceed to discover them as he would in the case of any other unknown variety of talk.

Unfortunately, linguists have not traditionally approached bilingual speech in this impartial way. Rather than assume that the underlying structures of the varieties encountered in bilingual speech communities were unknown (the usual field-work assumption), linguists have usually assumed, instead, that they were known, i.e., that they basically were nothing more than X "interfering" with Y and vice versa. As a result they frequently failed to familiarize themselves with the communities and speakers from which they obtained their corpuses of speech. They failed to notice that only some subsets of speakers in these speech communities showed substantial "interference" under all circumstances, that other subsets showed different kinds and amounts under varying circumstances, and that some showed none at all.[10]

Most particularly, they failed to note that certain subsets of speakers did not at all view their talk as consisting of "now X, now Y", or of "part X, part Y", or even of "X and Y" but, rather, viewed it as simply a kind of X, or a kind of Y, or, not unusually, as Z, that is, as a variety in its own right. The linguist's traditional conviction that the speaker's attitudes are entirely unrelated to his (the linguist's) task (a conviction that has its merits, to be sure, if not followed slavishly to one's own disadvantage) has kept most linguists from utilizing realistic social patterns as aids and guides toward realizing more revealing and more meaningful descriptions of bilingualism than are most of the artificial patterns thus far provided.

As a result of the methodological and theoretical rigidity with which bilingualism has been approached by historically oriented linguists the applicability of the old dialectological notion of a cline (i.e., of a slow but successively regular linguistic transition from one geographic area to another) has been little recognized in studying bilingualism. Even when social clines came to be recognized, in addition to geographic ones, the sociolinguistic notion of bilingualism as a social cline or scale within a territorially delimited speech community has yet to be seriously considered by traditional linguistic students of bilingualism to whom the implications of the more synchronically sensitive work in sociolinguistics are still largely unknown. Whereas the linguist's task might well be that of describing and, possibly, ordering the major varieties to be encountered in any socially complex bilingual speech community, the task thus far recognized by most linguists has been far more monolithic, far more artificial and far simpler than would optimally have been the case. All too many linguists interested in bilingualism have remained all too innocent of recent sociolinguistic data and theory that have developed largely (although not exclusively) on the basis of studies of bilingualism in bilingual speech communities.

3. Sociological inquiry into bilingualism

The brunt of sociological research and theory on bilingualism deals with data on large aggregates: countries, census tracts, school systems, etc. Perhaps as a result of this concentration on large social groupings and inclusive social institutions sociological research on bilingualism is characterizable as self-report-oriented, quantitative (statistical) and social category (rather than social interaction) oriented.

Little if any sociological research has faced squarely the problem of the relationship between self-reported bilingualism and actually observed or measured bilingualism. Indeed, most sociological students of bilingualism have not even planned or conducted self-report studies of their own but have, instead, depended on the data provided by governmental censuses. Thus the general methodological and conceptual problem of agreement between self-reported and operative bilingualism is compounded by the political and social pressures which often surround censuses in general and language censuses in particular. However, even where no such pressures obtain, governmentally conducted censuses dealing with bilingualism have invariably sought so little information as to make their findings more concealing than revealing. Governmental language censuses have rarely, if ever, gone beyond self-report with respect to the distinctions between mother tongue ("native" language or even "language most used in the respondent's home during his infancy," regardless of his own mastery or use at any time), current tongue (language "best known" or "most used"), and other tongue (other language "known" or "understood"). Bilingualism is, therefore, inferred for all those who do not name the same language in replying to any two of the probes that may be employed. Thus, the very social science that should be most concerned with exploring and clarifying discrepancies between self-report and actual behavior, most knowledgeable about the impact of social pressures on self-report, and most interested in the gains derived from contextual analysis of behavior has depended well nigh exclusively on data with serious shortcomings in all of these respects.[11]

Most recently the ancient and tottering edifice of census data on languages has been "buttressed" by more modern statistical tools. While these tools enable investigators to derive interesting indices from census data (e.g., given the proportions of individuals in a tract who claim only X, only Y and both X and Y, what is the likelihood that any two randomly selected individuals will be able to communicate: Lieberson 1964, 1965) the data themselves remain as poor as heretofore and probability theory replaces sociological theory for the study of communication between bilinguals. Surely, communication between two members of a bilingual speech community depends on more factors (and on sociologically more interesting factors) than on whether they have a "language" in common. Indeed, in intra-group (diglossic) bilingualism (which has received so little explicit sociological attention[12]) communication problems still obtain although at least one "language"-in-common is known by all members of the community. How much truer must this be in the case of inter-group bilingualism where individuals clearly do not meet at random, clearly do not seek to communicate if they do meet, and clearly do not agree to use the other's language even if they do know it (Wolff 1959). Census data on bilingualism certainly represent a proper goal and level of sociological analysis. However, much needs to be done before we can tell how well such data correspond to verifiable behavior. Correctly interpreted responses to questions that are meaningful to various population segments (segments that may vary in familiarity with abstract categories such as "language" and others discussed below) still represent the goal rather than the reality of most sociological research on bilingualism.

Similarly unfortunate for an understanding of bilingualism has been the sociologist's over-dependence on analysis via social categories, whether ethnic, religious, class or other. Typically, sociological analyses of "claiming" (i.e., of individuals claiming bilingualism, claiming a certain first and a certain second language, etc.) proceed by comparing proportions across a number of primary categories (French-Canadians, English-Canadians, other; or Protestant, Catholic, Jewish, other) or across a number of cross-classified categories (Protestant: lower class, middle class, upper class; Catholic: lower class, middle class, upper class; etc.). Between-category differences are then interpreted or explained in terms of assumed or hypothetical social processes. Although very cogent arguments bearing upon bilingualism and social change or social interaction are developed in this way these have rarely, if ever, been substantiated at the level of more detailed, naturalistic, small group behavior. Such study might validate the categories employed and, at the same time, refine and validate the theories advanced to explain the differences between categories. The sociologist must inform us more fully of respondents' social reality. The community of function with respect to language may be neither single nor uniform. The sociologist's categories of "language" and of "community" would be more revealing if they were not only his but his subjects' as well.

Thus, the sociologist's categories are frequently deficient in the same way as are the psychologist's or the linguist's. They are higher order abstractions without sufficient lower order validation or documentation to be equally and routinely applicable to as many different populations and situations as those to which they have been and are being applied by means of the mere administration of "standard" instruments. If they were considered, instead, to be avowed abstractions that fortunately may coincide with certain patterns of behavior or of interaction, then the latter themselves could be studied to help validate the use of the former for particular investigations. When sociologists engaged in survey research (i.e., in research directed toward large populations or toward the institutions that handle such populations) utilize categories for the purpose of data collection or data interpretation it is because they assume a conceptual chain linking higher order categories (to middle order categories) to directly observable behavior. Different ethnic groups may be of importance to a sociological study of bilingualism primarily because of differing socio-culturally based behaviors with respect to social mobility and social change. In that case these behaviors per se (rather than ethnic categories which imply an interest in ethnicity) require study in connection with the consequences of interest to the investigator. Religious groups may be of importance to a particular sociological study of bilingualism merely because they vary in the extent to which they sanction activities leading to personal gain. In that case these activities themselves (rather than religious categories which imply an interest in religiosity or in particular religious beliefs) deserve to be the focus of inquiry. Social class, political affiliation and countless other sociological categories are in need of translation and validation via small-group interaction processes if sociological theories are to be strengthened by confirmation or altered by disconfirmation at a level of detail which cannot be attained when only higher order categories, without social-process-underpinnings, are involved.

All in all, the three disciplines that have been characterized above are quite similar in their shortcomings with respect to the study of bilingualism. Bilingualism has normally been a fringe topic rather than a central topic within each of them. As a result, the most advanced workers and the most advanced theoretical-methodological accomplishments of these fields have hardly begun to find their way into the literature on bilingualism per se. Bilingualism research has more frequently suffered from the use of discipline-derived (rather than problem-derived) cut-and-dried approaches. Investigators have employed impoverished models of bilingualism, utilized conceptually impoverished data gathering approaches, obtained impoverished results and, as a result, reinforced an impoverished view of the field. It would be good to break out of this vicious circle.

II. A Sociolinguistic Model for the Study of Bilingualism.

Although many points in the following discussion are formulated in somewhat tentative terms its overall goal is to proceed from higher order to successively lower order constructs[13] in the organization of a descriptive-predictive theory and parallel methodology for the study of bilingualism. The underlying framework for this theory is sociolinguistic and, more generally, sociological; thus, while it seeks to make obvious and basic provision for psychological and, particularly, for linguistic inquiry, the entire venture is unified or integrated via considerations derived from the sociology of language. In terms of the theory/methodology as a whole the statement must be considered as still untested and unrevised, i.e., as "programmatic". On the other hand some empirical work has been done on almost all of its components and, as a result, a single study to empirically interrelate all of them within a common substantive undertaking does not seem difficult to envisage, although it may well prove difficult to implement.

1. Identification with the speech community and with its language-related community values

For a community to maintain two "languages" in a more-or-less stable manner each must be associated with a particular subset of complementary community values. Many diglossia situations[14] have been aptly characterized as maintaining an H(igh) and an L(ow) speech variety. The L variety is most strongly associated with values of intimacy, closed kinship and friendship networks, hearth and home, the daily rounds, the "low culture" of ethnicity, spontaneity and comradeship; in short, the primordial "givens" that are frequently perceived as the common, natural and immediate consequences of community membership. The H variety, on the other hand, is most strongly associated with status differentials, emphases on interpersonal distance and power relationships, formality and ritual, High Culture (religion, formal learning, government and ideology). These two clusters of values must be viewed as complementary (i.e., as non-competitive, as not being mutually exclusive at the socio-cultural level) and, as a result, it is considered appropriate for individuals to subscribe to both rather than merely to one or another (Nahirny and Fishman 1965; Fishman 1967).

Generally, an individual's use of H or L is predictable in terms of whether an interaction in which he engages is viewed by his culture as normally an L-related or an H-related interaction. More specifically, his use of H or L becomes predictable in terms of his own acceptance of (identification with and involvement in) each of the two major value clusters in his culture. Such acceptance or identification can be inferred from manifest behavior by trained observers who have the opportunity to sample a society's entire "life space." In work with individual informants such acceptance or identification can be inferred by a skilled field worker who reviews with a subject his daily activities, his interests and beliefs, his friends and associates, his duties and responsibilities, his likes and dislikes, etc. Finally, such acceptance or identification can be self-reported by more literate, more mobilized, more self-reflective and introspective individuals and may be declared by them in direct reply to questionnaire or interview items. These three data gathering methods are mentioned above in the order of increasing abstraction from the data of primary social interaction. It behooves an investigator to be certain of the lower orders of abstraction before operating with data from the higher orders.

Thus, if one were to seek to develop measures of identification with language-relevant community values one might begin with ethnographic (participant) observation to determine what being an Xman means to members of speech community X. What behaviors are considered to be related to being an Xman and what is the belongingness interpretation or elaboration of these behaviors? Such information is obtained by watching, by asking "why do you do (or wear, or eat) this?"; "why do you spend time with so-and-so?"; "why do you say X to A, but Y to B?"; "why do you take off your hat here but not there?", etc. If the answers are somewhat abstract ("...because that is how one speaks to a friend",..."because that is the way an Xman should dress",... "because that is how to show respect"...) then questions can be tried at a more abstract level. The level of abstractness of research on bilingualism must be determined not only (as currently) on the basis of sample size, time and funds, but also in conjunction with the level of abstractness that seems familiar to the subject upon whose verbal and behavioral responses a particular investigation depends. However, the less abstract the elicited data the more abstraction must be added by the investigator in his subsequent analysis if his basic notions are as abstract as that of "identification with community values."

The constant focus of the observations, questions and elicitations in this area is "language-relevant" to the extent that the investigator seeks to determine the behavioral or attitudinal clusters that are associated with the speech varieties that he assumes to exist. What variety is employed when interacting with family, with employers, with government representatives? What variety is employed when interactions take place in the home, in the store, in the church, in a public place? As a result of laboriously piecing together the situations and interactions that accompany variety X, those that accompany variety Y, and those that accompany variety Z, the investigator may successively differentiate (two or more) clusters of behaving-and-valuing. He can then utilize these clusters for the purposes of final data collection, via observations of additional individuals, via questioning (interviewing) them, or via administering questionnaires or attitude scales to them, depending on their sophistication (behavioral level of abstraction) with respect to identification with (and implementation of) the major value clusters of the culture. Empirical measures of individuals with respect to this parameter become possible--and possible at various levels of abstraction--if the parameter itself is inductively developed.

The concept of value clusters may be particularly attractive for macro-level studies that seek to describe large social aggregates. Nevertheless, it is likely to be a most unreliable parameter at that very level unless it has been very painstakingly derived from and confirmed by micro-level work with differentially sophisticated subjects. Furthermore, particularly in connection with language variation as different value clusters are implemented, lock-step parallelisms must be avoided. A shift to implementation of value cluster A in communication network X, from prior implementation of value cluster B, may well be accompanied by a shift from variety 1 to variety 3. However, in communication network Y the same shift in value implementation may be accompanied by a verbal shift from variety 2 to variety 5. Value clusters are much grosser and looser abstractions than speech varieties. The amount of shift in the latter given an obvious change in the realization of the former must be empirically determined and may well differ for the various educational, occupational and interactional networks within a larger speech community.

2. The "domains" of culturally identified behavior

Even when the data defining acceptance of or identification with cultural value clusters is itself of a low order of abstraction, i.e., even when identification is inferred from directly observable behaviors, there still remains the fact that the investigator's inference is to a parameter at a very high level of abstraction. Our task then is not only to be sure that the investigator's analytic parameters are in touch with reality, but, wherever possible, to accomplish the latter by employing parameters thatare themselves more concrete. The domain *is* such a parameter *vis-a-vis identification with cultural values* since it represents an attempt to specify the most common institutional arenas in which cultural identifications are enacted (Fishman 1965). Domains themselves are abstracted from notions of domain-appropriate persons, domain-appropriate places, and domain-appropriate times--all of which must be carefully verified (via observation, interviewing and/or self-report) rather than taken for granted.

If the stable maintenance of two varieties depends upon the stable maintenance of two complementary value systems, then the latter, in turn, must be expressed or enacted in two complementary sets of domains, in each one of which one variety or another is clearly dominant. In a complex western culture it may well be that domains such as family and friends, education, religion, work sphere and government are functionally realistic ones. In each, a particular set of domain-appropriate people interact with each other in domain-appropriate locales and during domain-appropriate hours.[15] Those who identify with or accept the complementary cultural value clusters will utilize the culturally approved speech variety in their domain-appropriate behavior. Those who do not accept these separate clusters will exercise pressure on behalf of domain overlap leading to language shift (Fishman 1964).

If domains have lower order validity (i.e., if they are more directly derived from actual observations and discussions concerning the kinds of people that come together in kinds of places, at particular times, to engage in the kinds of behaviors appropriate to such people, places and times, rather than postulated "ad hocs") then there is no reason why data may not be summed for many individuals to determine which speech variety is predominantly employed in which domain. If education is a validated domain then data on many pupil-teacher interactions in many school rooms interacting in connection with school affairs during school hours can be appropriately treated statistically and domain-wide indices derived with respect to variety dominance. Similarly, statistical indices for several empirically validated domains can be compared with each other.

However, as will become abundantly apparent in the sections that follow, the concept of domains not only structures the data of social behavior at the macro-aggregate level but it also masks certain natural variation and incongruency in such behavior. Domains refer to gross, norm-related and institutionally recognized regularities. They do not provide for incongruent cases (e.g., interaction between parents and their children in the classroom) nor for variation in interaction in order to attain varying personal ends. Given a particular speech event in which interlocutors X (parent) and Y (child) discuss topic T with each other (e.g., getting grades in school) it is not always immediately possible to relate this discussion to an unambiguous domain without knowing several other things as well. Thus, domains are abstracted from an abundance of concrete, lower order data rather than universal pigeon-holes to which isolated fragments of uncontextualized data can be assigned.

3. Dimensions of social relationship

Thus far we have mentioned the individual's identification with the language relevant values of his culture and the domains in which such culturally recognized behavior transpires. We now move to a somewhat less abstract parameter, namely, the relationship of individuals to each other. As before, our first approach to this parameter is at its most general level. At this level we scrutinize a component that was present in each of our two prior parameters, namely, the extent to which the relationships between individuals are governed by a single, overriding, fully formed set of specifications (closed networks) vs. whether their relationships permit the implementation of alternative values, alternative interests, alternative self-views and alternative other-views (open networks). In the first instance a single overriding consideration governs all interactions, including the linguistic realizations of these interactions. Such networks will require the use of a particular speech variety for as long as these networks are not disavowed. In the second instance, the experiences and views of the individuals involved are more variable. As a result they may stress one view or another, one experience or another, one self-concept or another and, in so doing, find one speech variety or another more appropriate for use with each other. Open and closed networks vary as to the extent to which they permit their members to reveal and stress different identities to each other. Certain closed networks may permit only of L-appropriate identities; other may permit only of H-appropriate identities. Open networks permit both. (Therefore the identities that *are* implemented in open-networks depend on yet other, more concrete and more variable factors).

While open and closed networks are obviously abstractions, they are easily specifiable, constituted and/or discovered in terms of the current characteristics or the prior associations between their constituent members. However, in another sense, network types are abstractions because social relations are specifiable in terms of much more precise and naturalistically real role-relationships. Indeed, each domain implies certain role relationships that are particularly pertinent to it. Thus, parent-child, husband-wife, sibling-sibling, godfather-godchild, uncle-nephew, etc., are all role-relationships pertaining to the (assumed, until verified, for any given speech community) "family and friendship domain." Similarly, cleric-layman, teacher-pupil, employer-employee, judge-litigant, are all specific role-relationships that pertain to (assumed, until verified, for any given speech community) other domains of activity. Of course, the specific role identities and role-relationships which are functionally operative must be empirically determined (by observation, interviewing and/or testing) in each speech community (Goodenough 1965). Furthermore, those that are differentially related to language (or variety) choice must be determined and, for sociolinguistic purposes, given recognition above that accorded to alloroles. Finally, the role-relationships themselves may be more parsimoniously (though abstractly) groupable or clusterable into a very few types, such as predominantly open and closed relationships (networks), relationships between weaker and stronger interlocutors, relationships between younger and older interlocutors, etc. It is from this point of view that open and closed networks, though less abstract than the domains in which they transpire, must, in turn, be considered more abstract formulations of the specific role-relationships into which networks can be further subdivided. Network types are manageable and desirable categories of social relationships--indeed, they appropriately may be employed in large sample statistical studies--precisely because (and only if) their counterparts at the level of small-group face-to-face interaction can be made quite clear.

While it would be incorrect to consider network-types as necessarily historically or experientially determined (since, under properly conducive circumstances, closed networks may be quickly established between individuals who have had little or no prior contact with each other), there is a sense in which networks are not in the same line of progression as that which exists between major value clusters, domains and role relationships. Whereas domains tend to correspond to particular value clusters more than to others (i.e., they each witness the realization of certain major cultural values more than others) and whereas role relationships clearly tend to correspond to certain domains more than to others, networks do not necessarily stand in a similar branching or part-whole relationship to the components in this progression. Networks describe or characterize *kinds* of role-relationships along the dimension of permissable *role fluidity*. Individuals who have experienced great danger together, or great intimacy, may permit no other considerations to govern their future relationships. Individuals who stand poles apart in status, rights and obligations may be similarly fixed and unalterable in their relationships. However those who neither partake in a *common*, intensive past nor in a current overriding *difference* can range over a number of similarities and differences in the course of a particular encounter without definitely leaving the middle range of role-relationships. Thus, *networks are descriptive of role-relationships rather than hierarchically related either to them or to the domains in which they are realized*.

Just as network-types represent abstractions that are realizable only in terms of concrete role-relationships, so are domains abstractions that are realizable only in terms of summing concrete situations. Situations (see Bock 1964; Blom and Gumperz 1966) are defined by the intersection between specific role-relationships, specific settings (locales) and specific times. Domains are generalizations from or summations of many similarly categorized situations. A situation per se involves a face-to-face interaction between interlocutors enacting stipulated role-relationships (patient-doctor), in the setting appropriate for those relationships (physician's office), at a time appropriate for those relationships (office hours). It is precisely because situations underlie domains that domains can be more than mere abstractions and can have sufficient contact with empirical reality to remain meaningful even as categories for data on large aggregates.

However the relationship between domains and situations is somewhat more complicated than the above formulation alone applies. At the higher level of generalization, where we utilize domain analysis, we limit ourselves to co-occurences revealing domain appropriateness. At the lower level of generalization, where we utilize situational analysis, no such restriction is called for. An incongruent component (be it locale, time or role-relationship) produces a new situation[16] and, as a result, may change its domain relevance. Furthermore, just as network-types do not stand in simple hierarchical position with respect to domains and role-relationships so, too, the position of situations in this progression is not a simple one. In a sense, situation is the higher order concept since it subsumes role-relationship as one of its components. However, in another sense, role-relationship is the more general term since at least some role-relationship may be realized in (or may be effective in) several different situations. Thus, situations are not mere subheadings under role-relationships but they provide the parameters for defining the limits within which role-relationships can remain unchanged. Network-types seek to recognize the absence or presence of an inter-personal distance component to role-fluidity between interlocutors. Situational-locale and situational-time are other factors influencing role-fluidity.

The final point to make at this juncture is that the parameters of functional social description are predictors with respect to language choice and language use. Below the level of overarching identification with the values of the bilingual (diglossic) speech community and the prediction of speech variety use which such identification permits, below the level of involvement in broad domains of behavior and the prediction of speech variety use which domain involvement permits, below the level of role relationships and the prediction of speech variety which such relationship permits, we reach a level of face-to-face encounters that permit even more precise predictions. The variety most likely to be employed by a cleric preaching to parishioners on a specific religious topic in the place of worship can be predicted more confidently than can more "all purpose" predictions flowing from identification with community intimacy values, or from participation in the religious domain, or from cleric-parishioner role-relationships more generally. Thus, the progression from broader to narrower categories of analysis is not only a progression from more abstract to more concrete, from more general to more specific, but, also, a progression from descriptive (or generally descriptive) adequacy alone to predictive power with respect to the what and how of variety use. As the same individuals proceed from task-to-task and from place-to-place over time their definitions of the situations in which they are involved and of their role-relations change and speech variety choice and use will change (or remain unchanged) according to the norms of the speech community.

4. Types of interactions within social relationships

More fleeting but also more concrete than social relationships are the kinds of interaction that transpire between individuals in in the course of a situation. However, the very formulation "kinds of interactions" implies that any typology of interactions, as every typology, is an abstraction to some degree from the myriad of concrete instances that make up all behavior. Interactions have been typed as either "personal" or "transactional" depending on whether they stress the absence or presence of status distinction (Gumperz 1964). Thus, within the same situation (i.e., holding interlocutors, more general purpose, place and time constant) minor and subtle variations occur in social relationshpps, depending on the drift of moment-to-moment experience or concordance within relatively open networks. In closed networks a strong altercation between interlocutors may be needed to alter the network type, lead to a redefinition of role-relationship, change the situation and, therefore, result in a change in variety. Open networks permit more subtle changes to effect variety choice. Since the individuals involved have no overriding bonds between them, more minor changes (in topic, in emphasis, in mood, etc.) may lead to inter-personally recognizable changes in variety. Thus, a change in speech variety (from L to H or vice versa) in an open network as the result of change from a personal to a transactional interaction (internal speech: ..."that show off! I'll show him who knows more about thermo-dynamics!") can occur without the situation being redefined at all. Such variation has been aptly referred to as stylistic or as metaphorical, as distinguished from situational switching. This is not to imply, however, that metaphorical switching always or even usually requires a change in interaction type, since it is often a by-product of humor, emphasis, etc. Finally, it should be clear that situational switching occurs in both open and closed networks, although perhaps less explosively or overtly in the former than in the latter.

At this point of our analysis, where we have come down to the level of interaction type, we are approaching the arena of message itself. The data for determination of interaction type is not yet found exclusively in the message (as would be the case if we carried our analysis further "down" into speech events and even more minute analysis of interpersonal purpose and understanding), but it is already partially so. Other clues are available: physical distance between interlocutors, postural changes, rapidity of speech, pitch and volume and stress. Nevertheless, what the interlocutors are saying to each other is also germane (i.e., not only "how" they are saying "what" but actually what they are talking about) when we seek to differentiate between personal and transactional interactions, in a way that was not true in connection with any of our higher order abstractions. It is, therefore, at this point, where an even more phenomenological sociology, a social psychology of verbal symbolic interaction is needed(Garfinkel 1964; Sacks 1963; Schegloff 1967; Soskin and John 1963), that this discussion will brought to a close.[17]

5. Input and output: The involvement of psychology and linguistics

In approaching a bilingual speech community there must be some concepts that the investigator brings with him (as input) to his investigations and others that he takes away (as output) from them. Since the form and substance of the latter will be largely dependent upon the former it is of the greatest importance that bilingual speech communities be studied with a clear purpose and with a rich and consistent theory in mind. The parameters presented in this section have been developed by several investigators, working both individually and cooperatively, over a period of years, for the purpose of describing and predicting language use (variety choice) in stably diglossic speech communities. Had a more dynamic purpose been uppermost (for example, predicting the drift of language shift given the growth of urbanization) a somewhat altered set of social parameters would have been preferred (Fishman 1965). Under any circumstances the parameters would have sought to interlock, at successively less abstract levels, in such a fashion that even the most abstract of them could be related to naturalistic reality both in its own right _and_ in its relationship to lower order parameters.

The input in the parameters here presented is well nigh exclusively social (sociology, social anthropology, social psychology). A parallel accompaniment is assumed on the part of psychology and linguistics, i.e., it is assumed that both of these disciplines can adopt the social parameters here presented as contextually appropriate for their own concurrent inquiries. Psychology has long been accustomed to the notion of underlying dimensions or of underlying parsimonious structure. In recent years the Chomskian revolution (Chomsky 1965) has made linguistics increasingly aware of this notion (albeit in an unnecessarily anti-sociolinguistic framework). Thus, the psychological contributions to the particular study of bilingualism here envisaged would be made with value identification, domains, situations, role relations (as well as their fluidity limits in networks), and interaction types as dimensions of the bilingual performance to be observed, elicited or stimulated and as dimensions of the bilingual capacity to be inductively derived. Similarly, the linguistic contribution to a study of this kind would also operate under similar constraints, to the end that the above mentioned parameters are utilized as ever more refined demarcations for the speech varieties encountered in bilingual communities.

What are the outcomes to be expected from an approach such as that here envisaged? There will, of course, be outcomes in terms of the competence repertoires and linguistic repertoires as indicated by the enumerated parameters. Thus, while both competence repertoire and linguistic repertoire are theoretical input notions with which both psychologists and linguists may well approach the study of bilingualism, the empirical contours of both, particularly in their multiply contextualized states, are outcomes of such study. Other outcomes are also within easy grasp of investigations along these lines. Of fundamental interest to the sociolinguist are questions relating to role repertoire in terms of role access, role compartmentalization and role fluidity (Gumperz 1964). Parallel sets of questions exist relating to the linguistic repertoire and the capacity repertoire. These too can be explored via the approach here adumbrated.

It goes without saying that if a psychological (rather than a social) framework were employed for the integrative study of bilingualism other topics would be encompassed or spotlighted that have been ignored in this presentation. Questions of personality, immediate purpose, stylistic (metaphorical) variation and others that are not parsimoniously viewed from the point of view of social patterning might then come to the fore. The major considerations would remain unchanged however, namely, (a) contextualization at various levels of abstraction, (b) naturalistic (ethnographic) and empirical validation of categories and (c) meaningful relationship between parameters. Given these points, research on bilingualism may proceed from various perspectives and arrive at equally valuable conclusions.

SUMMARY

This presentation has tried to make four major points:

1. A sociolinguistic study of bilingualism must focus upon the functionally different contexts of verbal interaction in diglossic speech communities.

2. A sociolinguistic study of bilingualism can solve the problem of generalization by finding a consistent set of parameters that relate micro-analysis to macro-analysis. Macro-proper parameters and categories can and must have micro-proper underpinnings.

3. Not every cultural value is related to a different speech variety and, therefore, variation in the implementation of values does not necessarily lead to a change in variety choice. Thus, from the point of view of code-selection there are allo-values that cluster together functionally. Similarly, there are allo-domains, allo-roles and allo-situations from the point of view of code-selection. The functional distinctions at each level of analysis must be empirically discovered in each bilingual setting.

4. Sociolinguistic theory is sufficiently advanced to provide a framework for empirical interdisciplinary work on bilingualism on the part of those three disciplines that have thus far usually approached this topic separately.[18]

Footnotes

1. The preparation of this paper was supported by the Language Research Section of the Office of Education DHEW under grant 1-7-062817-0297. I am indebted to my colleagues John Gumperz and Robert Cooper and to Larry Greenfield, Gerard Hoffman, and Roxana Ma, research assistants, for many of the ideas developed in this presentation.
2. Work on bilingualism in the field of education has predominantly followed psychological models and employed psychological or psychometric research methods. As a result, the work of educationists will be referred to under the rubric of "psychology" for the purposes of this paper.
3. This may explain (although it does not at all justify or validate) Berelson's claim that the following statement is a proposition on which there is substantial agreement among social scientists: "Children taught two languages from the start are handicapped in both, as compared to the rate of a child learning either language alone. The difference becomes increasingly noticeable with age, to the extent that the child may have serious difficulties upon entering school." (Berelson and Steiner 1963, p. 61). I consider this statement to be simultaneously false (in that it flies in the face of elitist bilingualism-and-educational-excellence throughout history), misleading (in that it fails to distinguish between bilingualism per se and the economic and social disadvantage to which lower class bilinguals have been subjected), and parochial (in that it fails to recognize that studies of

socially dislocated bilingual minorities in the United States or in other centers of recent immigration, urbanization and industrialization deal with only one of the various naturally occurring kinds or contexts of bilingualism). This is not to say that there are no "hidden costs" in bilingualism, but merely to point out that these costs, if any, are far from obvious, inevitable and incapacitating and must first be located and then weighed against equally intangible "assets." Both "costs" and "assets" per se are probably relatively minor in comparison to those that are derivative of social concomitants of bilingual functioning.

4. Psychologists interested in bilingualism would doubtlessly agree that variations occur in the realization of an individual's bilingual capacity but these are viewed as either developmental or, more simply, as error variance. Since developmental variance is cumulative or directional over time bilingualism is still viewed as basically uniform or set for the individual at any particular developmental age. Error variance pertains to supposedly extraneous and inconsequential changes in performance due to contaminating factors such as fatigue, fright, motivation, etc., which are merely modifiers of bilingual performance rather than part of the basic, underlying bilingual capacity per se, the latter alone being of genuine interest to the psychologist.

5. Many of these highly speeded recognition-fluency tests are further limited in applicability to languages sharing a common alphabet and equally strong reading traditions. Lacking the latter, the very fact that the stimulus is printed tends to favor one language over another in recognition and in response. Finally, the

utilization of printed stimuli for oral response (as opposed to aural-oral stimuli for aural-oral response) introduces additional complexities that have commonly been overlooked. Not only are questions of media-interaction raised but also questions of the comparative status of such interaction for each of the two languages involved. Thus, going from printed x to spoken x in language A may present no novelty whereas a similar progression for language B may be largely without precedent (or less precedented) in a concrete bilingual situation.

6. Not only do many cultures place no generalized value on speed (since only certain behaviors are appropriately performed quickly) but some carefully differentiate between speed on the one hand and intelligence, reasonableness, admirableness, deliberateness, on the other. Thus the Hausa word for admirable, intelligent, capable (proficient) is "hankali", which is also the word for slow, deliberate, careful. Similar homonyms exist in Welsh and other languages.

7. There are, of course, a few psychological measures of bilingualism that are basically oriented toward factors other than speed. Complexity of utterance is one such and correctness is another. However, both of these measures are highly linguistic in character and can hardly be considered psychologically oriented (i.e., tied to psychological parameters of language behavior) approaches to bilingualism. Yet other measures, such as vocabulary breadth, type-token ratio and measures of synonym productivity, are reflections of lexical richness which would seem to be meaningful only if the respondent's role and situational richness were also known.

8. This is a technical rather than obvious term and will be defined below.

9. This is not to say that scientific theory ever deals directly with reality or that it can ever be other than a parsimonious abstraction (formulation) of reality. Even componentialized and contextualized sociolinguistics deals with abstracted parameters. The latter, however, when most wisely derived, seek to be as closely pertinent to complex reality as possible.

10. As a result of linguistic disregard for this phenomenon of subsets of speakers whose verbal repertoires are situationally and functionally patterned ("structured") the laundry-lists of examples of phonetic, grammatical, lexical and semantic "interference" that have been published are sociolinguistically quite worthless and misleading. Their implication that most if not all members of the bilingual speech communities under study reveal the kinds and degree of "interference" indicated by the examples listed is almost invariably wrong. Language "educators", who are most concerned with teaching pure, contextually lifeless varieties, have become particularly enamored of the concept of "interference" and have fully exploited its inherently proscriptive implications.

11. Serious criticism of census figures on language, indeed criticism of census questions, per se, goes back at least 40 years. For an early discussion of these very matters, as well as for some early recommendations concerning better questions that might be asked, see Kloss 1929. For a more recent plea, see Lieberson 1966. The basic similarity between the recommendations contained in these two papers is indicative of the lack of progress during the nearly two score years that separate them.

12. The very fact that anthropological linguists and sociolinguists from backgrounds other than sociology have contributed most to the clarification of diglossia and its socially normified functional allocation of varieties is amply indicative of the lack of basic understanding that most sociologists have brought to the study of bilingualism in general and to the study of intra-group bilingualism in particular (Fishman 1967).

13. The opposite progression, namely, from more direct, social process considerations and, therefore, from lower order constructs to successively higher order constructs, is also entirely possible for the presentation of the point of view to be advanced here and, indeed, may be considered prefereable by some in that it corresponds to the more desirable sequence for deriving valid higher order theoretical constructs.

14. At the societal level of analysis, particularly at the higher orders of abstraction that are so removed from concrete, face-to-face interactional data, the term "diglossia" (which pertains to socially patterned, within intra-group bilingualism) seems to be much more appropriate than "bilingualism" (which may best be retained to refer to individually patterned behavior that is frequently oriented toward inter-group purposes). In a sense, the entire problem of interrelating sociological, psychological and linguistic approaches to the study of bilingualism may be viewed as an attempt to explore the relationship between individual bilingualism and societal diglossia. The original diglossia concept, as developed by Charles A. Ferguson (1959), dealt largely with societies that maintain two quite independent languages (Spanish

and Guaraní, classical and vernacular Arabic, Hebrew and Yiddish, High German and Swiss German, etc.), but the same line of thought is equally applicable to any superposed varieties maintained by a speech community, including the local, regional and national varieties of talk available in most purportedly "monolingual" polities (Gumperz 1960, 1961, 1962). Many initial questions indicate that inter-group bilingualism is to such an extent the more familiar experience that it interferes with the understanding of intra-group diglossia, a worldwide phenomenon that many Western European and American behavioral scientists simply have not encountered.

15. Where this ceases to be the case language shift sets in and one language displaces the other. Note, however, that the maintenance of two clusters of community values (i.e., two modes of identifying with the community) does not necessarily imply that all members of the community are equally or similarly bilingual. Their bilinguality will depend not only on their identification with community values but also with their role access, role compartmentalization and role range, that is, with the extent to which individuals actually are permitted or enabled to enact the roles and to discharge the responsibilities that are involved in the H domains in particular (see below), since these (rather than the L domains) are likely to be most restricted.

16. A frequent first question with respect to diglossia is one that recognized the possibility that "topics" related to one value cluster may need to be discussed between individuals whose relationship is most directly pertinent to the other value cluster.

Such questions frequently assume that parameters employed in sociolinguistics (such as value clusters, domains, networks, role-relationships, situations) are mutually exclusive rather than at successive stages of refinement in order to cope with the variance remaining at higher (and grosser) levels of analysis. The prediction of speech variety use between a clergyman and his parishioner while engaged in non-religious pursuits, in non-sanctified time and space, is predictable only if we can appropriately identify the new situation that obtains. If pursuit, locale and time are all altered it is most likely that the role-relationship too will change and that the situation will be redefined as mountain climbing, fire fighting, love making, spy chasing or whatever, not between a clergyman and parishioner but between two individuals in some other role-relationship. Just as there are few if any ungrammatical sentences in the speech perception of native speakers so there are few if any permanently ungrammatical situations in the social perception of members of a speech community. One or another clue is utilized to redefine ambiguous or incongruent situations or to alter the situation itself.

17. Although much work is now going on relating to this very level of analysis (e.g., by Harold Garfinkel and Harvey Sacks at UCLA, Manny Shegloff at Columbia University, Edward Rose at University of Colorado, J. Rolf Kjolseth at UC-Davis) very little of it has been published. Most of the above mentioned investigators have issued mimeographed progress reports of preliminary versions of their finding and formulations.

18. I am indebted to the following colleagues for their helpful criticisms of an earlier draft of this paper: Robert Cooper, John J. Gumperz, Glyn Lewis, John Macnamara, Pauline Rojas.

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Chapter
VII-3

THE RELATIONSHIP BETWEEN MICRO- AND MACRO- SOCIOLINGUISTICS IN THE STUDY OF WHO SPEAKS WHAT LANGUAGE TO WHOM AND WHEN*

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The Analysis of Multilingual Settings

Multilingual speech communities differ from each other in so many ways that every student of societal multilingualism must grapple with the problem of how best to systematize or organize the manifold differences that are readily recognizable between them. This paper is directed to a formal consideration of several descriptive and analytic variables which may contribute to an understanding of who speaks what language to whom and when in those speech communities that are characterized by widespread and relatively stable multilingualism. It deals primarily with "within-group (or intragroup) multilingualism" rather than with "between-group (or intergroup) multilingualism", that is, it focuses upon those multilingual settings in which a single population makes use of two (or more) "languages" or varieties of the "same language" for internal communicative purposes (Fishman, 1967). As a result of this limitation, mastery or control of mother tongue and other tongue (or, more generally, of the various languages or varieties constituting the speech community's linguistic repertoire [Gumperz, 1962]) may be ruled out as a crucial variable since the members of many speech networks could communicate with each other quite easily in any of their available codes or subcodes. It seems clear, however, that habitual language choice in multilingual speech communities or speech networks is far from being a random matter of momentary inclination, even under those circumstances when it could very well function as such from a purely probabilistic point of view (Lieberson, 1964). "Proper" usage dictates that only one of the theoretically co-available languages or varieties will be chosen by particular classes of interlocutors on particular kinds of occasions to discuss particular kinds of topics.

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*A revision of "Who speaks what language to whom and when", La Linguistique, 1965, 2, 67-88. In press, in Directions in Sociolinguistics: The Ethnography of Communication, Dell Hymes and John J. Gumperz, eds., New York, Holt, Rinehart and Winston, 1968.

What are the most appropriate parameters in terms of which these choice-patterns can be described in order to attain both factual accuracy and theoretical parsimony, and in order to facilitate the integration of small-group and large-group research rather than its further needless polarization? If we can solve the problem of how to describe language choice in stable, within-group bilingual settings (where the limits of language mastery do not intrude), we can then more profitably turn (or return) to the problem of choice determinants in less stable settings such as those characterizing immigrant-host relationships and between-group multilingual settings more generally (Fishman, 1964).

A Hypothetical Example

American students are so accustomed to bilingualism as a "vanishing phenomenon", as a temporary dislocation from a presumably more normal state of affairs characterized by "one man, one language," that an example of stable intra-group bilingualism may help to start off our discussion in a more naturalistic and less bookish vein.

A government functionary in Brussels arrives home after stopping off at his club for a drink. He generally speaks standard French in his office, standard Dutch at his club and a distinctly local variant of Flemish at home.[1] In each instance he identifies himself with a different speech network to which he belongs, wants to belong, and from which he seeks acceptance. All of these networks--and more--are included in his over-arching speech community, even though each is more commonly associated with one speech variety than with another. Nevertheless, it is not impossible to find occasions at the office in which he speaks or is spoken to in one or another variety of Flemish. There are also occasions at the club when he speaks or is addressed in French; finally, there are occasions at home when he communicates in standard Dutch or even French.

Our hypothetical government functionary is most likely to give and get Flemish at the office when he bumps into another functionary who hails from the very same Flemish speaking town. The two of them grew up together and went to school together. Their respective sets of parents strike them as being similarly "kind-but-old-fashioned." In short, they share many common experiences and points of view (or think they do, or pretend they do) and, therefore, they tend to speak to each other in the language which represents for them the intimacy that they share. The two do not cease being government functionaries

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1. This example may be replaced by any one of a number of others: Standard German, Schwytzertütsch and Romansch (in parts of Switzerland); Hebrew, English and Yiddish in Israel; Riksmaal, Landsmaal and more local dialectal variants of the latter in Norway; Standard German, Plattdeutsch and Danish in Schleswig; French, Standard German and German dialect in Luxembourg, etc.

when they speak Flemish to each other; they simply prefer to treat each other as intimates rather than as functionaries. However, the careful observer will also note that the two do not speak Flemish to each other invariably. When they speak about world affairs, or the worlds of art and literature, not to mention the world of government, they tend to switch into French (or to reveal far more French lexical, phonological or even grammatical influence in their Flemish), even though (for the sake of our didactic argument) the mood of intimacy and familiarity remains clearly evident throughout.

Thus, our overall problem is twofold: (a) to recognize and describe whatever higher order regularities there may be in choosing among the several varieties that constitute the repertoire of a multilingual speech community (so that we need not always remain at an anecdotal and clinical level of analysis) and (b) nevertheless, to recognize the interpersonal fluctuation (=lower order societal patterning) that remains even when higher order societal patterning is established.

Topic

The fact that two individuals who usually speak to each other primarily in X nevertheless switch to Y (or vacillate more noticeably between X and Y) when discussing certain topics leads us to consider topic per se as a regulator of language use in multilingual settings.

The implication of topical regulation of language choice is that certain topics are somehow handled "better" or more appropriately in one language than in another in particular multilingual contexts. However, this greater appropriateness may reflect or may be brought about by several different but mutually reinforcing factors. Thus, some multilingual speakers may "acquire the habit" of speaking about topic *x* in language X partially because that is the language in which they were *trained* to deal with this topic (e.g., they received their university training in economics in French), partially because *they (and their interlocutors)* may *lack the specialized terms* for a satisfying discussion of *x* in language Y[2], partially because *language Y itself may currently lack as exact* or *as many terms for handling* topic *x* as those currently possessed by language X, and partially because *it is considered strange* or inappropriate to discuss *x* in language Y. The very multiplicity of sources of topical regulation suggests that *topic* may not in itself be a convenient analytic variable when language choice is considered from the point of view of the larger societal patterns and sociolinguistic norms of a multilingual setting, no matter how fruitful it may be at the level of face-to-face interaction per se. What *would* be helpful for larger societal investigations and for inter-societal comparisons is an understanding of how topics reflect or imply regularities which pertain to the major spheres of activity in any society under consideration. We may be able to discover the latter if we inquire *why* a significant number of people in a particular multilingual setting at a particular time have received certain kinds of training in one language rather than in another; or *what it reveals* about a particular multilingual setting if language X *is* currently actually less capable of coping with topic *x* than is language Y. Does it not reveal more than merely a topic-language relationship at the level of particular face-to-face encounters? Does it not reveal that certain socio-culturally *recognized spheres of activity* are, at least temporarily, under the sway of one language or variety (and, therefore, perhaps, under the control of certain speech networks) rather than others? Thus, while topic is doubtlessly a crucial consideration in understanding language choice variance in our two hypothetical government functionaries, *we must seek a means of examining and relating their individual, momentary choices to relatively stable patterns of choice that exist in their multilingual speech community as a whole*.

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[2] This effect has been noted even in normally monolingual settings, such as those obtaining among American intellectuals, many of whom feel obliged to use French or German words in conjunction with particular professional topics. English lexical influence on the language of immigrants in the United States has also often been explained on topical grounds. The importance of topical determinants is discussed by Haugen (1953, 1956) and Weinreich (1953), and, more recently, by Gumperz (1962) and Susan Ervin (1964). It is implied as a "pressure" exerted upon "contacts" in Mackey's descriptions of bilingualism (1962, 1965, 1966).

Domains of Language Behavior

a) The concept of domains of language behavior seems to have received its first partial elaboration from students of language maintenance and language shift among *Auslandsdeutsche* in pre-World War II multilingual settings.[3] German settlers were in contact with many different non-German speaking populations in various types of contact settings and were exposed to various kinds of socio-cultural change processes. In attempting to chart and compare the fortunes of the German language under such varying circumstances Schmidt-Rohr seems to have been the first to suggest that dominance configurations needed to be established to reveal the overall status of language choice in various domains of behavior (1932). The domains recommended by Schmidt-Rohr were the following nine: the family, the playground and street, the school, the church, literature, the press, the military, the courts, and the governmental administration. Subsequently, other investigators either added additional domains (e.g., Mak [1935], who nevertheless followed Schmidt-Rohr in overlooking the work-sphere as a domain), or found that fewer domains were sufficient in particular multilingual settings (e.g., Frey [1945], who required only home, school and church in his analysis of Amish "triple talk"). Howerer, what is more interesting is that Schmidt-Rohr's domains bear a striking similarity to those "generally termed" spheres of activity which have more recently been independently advanced by others interested in the study of acculturation, intergroup relations, and bilingualism (e.g., Dohrenwend and Smith, 1962).

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[3] The study of language maintenance and language shift is concerned with the relationship between change or stability in habitual language use, on the one hand, and ongoing psychological, social or cultural processes of change and stability, on the other hand (Fishman, 1964, 1966; Nahirny and Fishman, 1965).

Domains are defined, regardless of their number,[4] in terms of institutional contexts and their congruent behavioral co-occurrences. They attempt to summate the major clusters of interaction that occur in clusters of multilingual settings and involving clusters of interlocutors. Domains enable us to understand that language choice and topic, appropriate though they may be for analyses of individual behavior at the level of face-to-face verbal encounters, are, as we suggested above, related to widespread socio-cultural norms and expectations. By recognizing the existence of domains it becomes possible to contrast the language of topics for individuals or particular sub-populations with the predominant language of domains for larger networks, if not the whole, of a speech community.

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[4] We can safely reject the implication encountered in certain discussions of domains that there must be an invariant set of domains applicable to all multilingual settings. If language behavior is reflective of socio-cultural patterning, as is now widely accepted, then different kinds of multilingual speech communities should benefit from analyses in terms of different domains of language use, however defined and validated.

b) The appropriate designation and definition of domains of language behavior obviously calls for considerable insight into the socio-cultural dynamics of particular multilingual speech communities at particular periods in their history. Schmidt-Rohr's domains reflect not only multilingual settings in which a large number of spheres of activity, even those that pertain to governmental functions, are theoretically open to both or all of the languages present, but also those multilingual settings in which such permissiveness is at least sought by a sizable number of interested parties. Quite different domains might be appropriate if one were to study habitual language use among children in these very same settings. Certainly, immigrant-host contexts, in which only the language of the host society is recognized for governmental functions, would require other and perhaps fewer domains, particularly if younger generations constantly leave the immigrant society and enter the host society. Finally, the domains of language behavior may differ from setting to setting not only in terms of number and designation but also in terms of level. Thus, in studying acculturating populations in Arizona, Barker (who studied bilingual Spanish Americans [1947]) and Barber (who studied trilingual Yaqui Indians [1952]) formulated *domains at the level of socio-psychological analysis*: intimate, informal, formal and intergroup. Interestingly enough, the domains defined in this fashion were then identified with domains at the *societal-institutional level* mentioned above. The "formal" domain, e.g., was found to cdncide with religious-ceremonial activities; the "inter-group" domain consisted of economic and recreational activities as well as of interactions with governmental-legal authority, etc. The interrelationship between domains of language behavior defined at a societal-institutional level and domains defined at a socio-psychological level (the latter being somewhat closer to topical-situational analyses discussed earlier) may enable us to study language choice in multilingual settings in newer and more fruitful ways.

c) The "governmental administration" domain is a social nexus which normally brings certain kinds of people together *primarily* for a certain *cluster of purposes*. Furthermore, it brings them together *primarily* for a certain set of *role-relations* (discussed below) and in a delimited *environment*. Thus, domain is a socio-cultural construct abstracted from topics of communication, relationships betweencommunicators, and locales of communication, in accord with the institutions of a society and the spheres of activity of a speech community, in such a way that *individual behavior and social patterns can be distinguished from each other and yet related to each other*.[5] The domain is a higher order summarization which is arrived at from a detailed study of the face-to-face interactions in which language choice is imbedded. Of the many factors contributing to and subsumed under the domain concept some are more important and more accessible to careful measurement than others. One of these, topic, has already been discussed. Two others, role-relation and locale remain to be discussed. Role-relations may be of value to us in accounting for the fact that our two hypothetical governmental functionaries, who usually speak an informal variant of Flemish to each other at the office, except when they talk about technical, professional or sophisticated "cultural" matters, are themselves not entirely alike in this respect. One of the two tends to slip into French more frequently than the other. It would not be surprising to discover that he is the supervisor of the other.

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[5] For a discussion of the differences and similarities between "functions of language behavior" and "domains of language behavior" see (Fishman, 1964). "Functions" stand closer to socio-psychological analysis, for they abstract their constituents in terms of individual motivation rather than in terms of societal institutions.

Domains and Role-Relations

In many studies of multilingual behavior the family domain has proved to be a very crucial one. Multilingualism often begins in the family and depends upon it for encouragement if not for protection. In other cases, multilingualism withdraws into the family domain after it has been displaced from other domains in which it was previously encountered. Little wonder then that many investigators, beginning with Braunshausen several years ago (1928), have differentiated within the family domain in terms of "speakers." However, two different approaches have been followed in connection with such differentiation. Braunshausen (and, much more recently, Mackey [1962, 1965, 1966]) have merely specified family "members": father, mother, child, domestic, governess and tutor, etc. Gross, on the other hand, has specified dyads within the family (1951): grandfather to grandmother,

grandmother to grandfather, grandfather to father, grandmother to father, grandfather to mother, grandmother to mother, grandfather to child, grandmother to child, father to mother, mother to father, etc. The difference between these two approaches is quite considerable. Not only does the second approach recognize that interacting members of a family (as well as the participants in most other domains of language behavior) are hearers as well as speakers (i.e., that there may be a distinction between multilingual comprehension and multilingual production), but it also recognizes that their language behavior may be more than merely a matter of individual preference or facility but also a matter of role-relations. In certain societies particular behaviors (including language behaviors) are expected (if not required) of particular individuals vis-a-vis each other (Goodenough, 1965).

The family domain is hardly unique with respect to its differentiability into role-relations. Each domain can be differentiated into role-relations that are specifically crucial or typical of it in particular societies at particular times. The religious domain (in those societies where religion can be differentiated from folkways more generally) may reveal such role relations as cleric-cleric, cleric-parishioner, parishioner-cleric, and parishioner-parishioner. Similarly, pupil-teacher, buyer-seller, employer-employee, judge-petitioner, all refer to specific role-relations in other domains. It would certainly seem desirable to describe and analyze language use or language choice in a particular multilingual setting in terms of the crucial role-relations within the specific domains considered to be most revealing for that setting.[6] The distinction between own-group-interlocutor and other-group-interlocutor may also be provided for in this way when intergroup bilingualism becomes the focus of inquiry.

Domains and Locales

Bock (1964), Ervin (1964) and Gumperz (1964) have presented many examples of the importance of locale as a determining component of situational analysis. If one meets one's clergyman at the race track the impact of the locale on the topics and role-relationships that normally obtain is likely to be quite noticeable. However, we muct also note that domains too are locale-related in the sense that most major social institutions are associated with a very few primary locales. Just as topical appropriateness in face-to-face language choice is indicative of larger scale societal patterns, and just as role appropriateness in face-to-face language choice is similarly indicative, so the locale constraints and local appropriatenesses that obtain in face-to-face language choice have their large scale implications and extrapolations.

The Construct Validity of Domains

A research project dealing with Puerto Rican bilingualism in the Greater New York City Area has yielded data which may help clarify both the construct validity of domains as well as the procedure for their recognition. Since domains are a higher order generalization from congruent situations (i.e., from situations in which individuals interacting in appropriate role-relationships with each other, in the appropriate locales for these role-relationships, and discussing topics appropriate to their role-relationships) it was first necessary to try-out and revise intuitive and rather clinical estimates of the widespread congruences that were felt to obtain. After more than a year of participant observation and other data-gathering experiences it seemed to Greenfield (1968) that five domains could be generalized from the innumerable situations that he had encountered in the Puerto Rican speech community. He tentatively labeled these "family", "friendship", "religion", "education" and "employment" and proceeded to determine whether a typical situation could be presented for each domain as a means of collecting valid self-report data on language choice. As indicated below each domain was represented by a congruent person (interlocutor), place and topic in the self-report instrument that Greenfield constructed for use with high school students.

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[6] These remarks are not intended to imply that all role-relation differences are necessarily related to language-choice differences. This almost certainly is not the case. Just which role-relation differences are related to language-choice differences (and under what circumstances) is a matter for empirical determination within each multilingual setting as well as at different points in time within the same setting. In general the verification of significantly different clusters of allo-roles (as well as significantly different clusters of allo-topics and allo-locales) (see below) is a prerequisite for the empirical formulation of domains.

Domain	Interlocutor	Place	Topic
Family	Parent	Home	How to be a good son or daughter
Friendship	Friend	Beach	How to play a certain game
Religion	Priest	Church	How to be a good Christian
Education	Teacher	School	How to solve an algebra problem
Employment	Employer	Workplace	How to do your job more efficiently

Greenfield's hypothesis was that within the Puerto Rican speech community, among individuals who knew Spanish and English equally well, Spanish was primarily associated with family and secondarily with friendship (the two, family and friendship constituting the intimacy value cluster), while English was primarily associated with religion, work and education (the three constituting the status-stressing value cluster).[7] In order to test this hypothesis he initially presented two seemingly congruent situational components and requested his subjects (a) to select a third component in order to complete the situation as well as (b) to indicate their likelihood of using Spanish or English if they were involved in such a situation (and if they and their Puerto Rican interlocutors knew Spanish and English equally well). Section I of Table 1 shows that Greenfield's predictions were uniformly confirmed among those subjects who selected congruent third components. Spanish was decreasingly reported for family, friendship, religion, employment and education, regardless of whether the third component selected was a person, place or topic.

However, as Blom and Gumperz (1966), Fishman (1968b) and others have indicated, seemingly incongruent situations frequently occur and are rendered understandable and acceptable (just as are the seemingly ungrammatical sentences that we hear in most spontaneous speech). Interlocutors reinterpret incongruencies in order to salvage some semblance of the congruency in terms of which they understand and function within their social order. Were this not the case then no seemingly congruent domains could arise and be maintained out of the incongruencies of daily life. In order to test this assumption Greenfield subsequently proceeded to present his subjects with two incongruent components (e.g., with a person from one hypothetical domain and with a place from another hypothetical domain) and asked

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[7] For a discussion of the significance of value clusters in the study of diglossic societies and the relationship between domain analysis and value analysis see Fishman (1968b).

Table 1: SPANISH- AND ENGLISH- USAGE SELF-RATINGS IN VARIOUS SITUATIONS FOR COMPONENTS SELECTED BY BILINGUAL Ss (Greenfield)

I Congruent Situations: Two "congruent" components presented; S selects third congruent component and language appropriate to situation

(1 = All in Spanish; 5 = All in English)

Congruent Persons Selected

	Parent	Friend	Total	Priest	Teacher	Employer	Total
Mean	2.75	3.38	3.08	4.67	4.92	4.77	4.77
s.d.	1.67	1.22	1.15	.68	.30	.44	.37
n	12	13	13	12	12	13	13

Congruent Places Selected

	Home	Beach	Total	Church	School	Work Place	Total
Mean	2.33	3.50	2.60	3.80	4.79	4.27	4.34
s.d.	1.11	1.37	1.14	1.57	.58	1.39	.99
n	15	6	15	15	14	15	15

Congruent Topics Selected

	Family	Friendship	Total	Religion	Education	Employment	Total
Mean	1.69	3.33	2.64	3.80	4.78	4.44	4.38
s.d.	.95	1.24	.98	1.52	.55	1.15	.75
n	16	18	18	15	18	18	18

II Incongruent Situations: Two "incongruent" components presented; S selects any third component and language appropriate to situation

(1 = All in Spanish; 5 = All in English)

All Persons Selected

	Parent	Friend	Total	Priest	Teacher	Employer	Total
Mean	2.89	3.48	3.50	4.65	4.73	4.38	4.66
s.d.	1.41	1.21	.73	.63	.42	.74	.57
n	13	13	13	13	13	8	13

Table 1 continued

II Incongruent Situations

All Places Selected

	Home	Beach	Total	Church	School	Work Place	Total
Mean	2.63	3.86	2.77	3.71	4.39	4.42	4.10
s.d.	.80	1.05	.73	1.36	1.03	.98	.85
n	15	5	15	15	15	15	15

All Topics Selected

	Family	Friendship	Total	Religion	Education	Employment	Total
Mean	2.88	3.81	3.26	3.07	3.65	3.81	3.49
s.d.	1.07	1.16	1.05	1.03	1.59	1.06	.79
n	18	16	18	18	17	18	18

them (a) to select a third component in order to complete the situation, as well as (b) to indicate their likelihood of using Spanish or English in a situation so constituted. Greenfield found that the third component was overwhelmingly selected from either one or the other of any two domains from which he had selected the first two components. Furthermore, in their attempts to render a seemingly incongruous situation somewhat more congruent his subjects' language preferences left the normal relationship between domains and language choice substantially unaltered (directionally) regardless of whether person, places or topics were involved. Nevertheless, all domains became somewhat less different from each other than they had been in the fully congruent situations. Apparently, both individual indecisiveness as well as sociolinguistic norms governing domain regularity must be combined and compromised when incongruencies appear. Language choice is much more clear-cut and polarized in "usual" situations governed entirely by sociolinguistic norms of communicative appropriateness than they are in "unusual" situations which must be resolved by individual interpretation.

Greenfield's findings imply that the assumed relationship between face-to-face situations and larger scale societal domains obtains for self-report data. However, it remained necessary for other investigators to determine whether the domains adumbrated in this fashion have more general validity in the speech community under study.

A language census conducted among all 431 souls in a two-block Puerto Rican neighborhood in Jersey City yielded the data shown in Table 2. Above and beyond examining the replies obtained to the individual census items the reader's attention should be directed to the

Table 2: Language Census (Fishman, 1968a)

Item	Yes*	Little*	No*	NP*
1. Can Understand Spanish conversation?	779	135	019	067
2. Can Speak Spanish (conversation)?	833	077	016	074
3. Can Read newspapers/books in Spanish?	397	049	318	237
4. Can Write letters in Spanish?	390	030	339	241
5. Can Understand English conversation?	571	176	183	070
6. Can Speak English (conversation)?	536	181	216	067
7. Can Read newspapers/books in English?	455	130	206	209
8. Can Write letters in English?	387	063	327	223
	Span*	Eng*	Both*	NP*
9. First language understood (conversation)?	886	002	039	072
10. First language spoken (conversation)?	884	---	023	093
11. First language read (newspapers/books)?	401	---	297	302
12. First language written (letters)?	383	002	276	339
13. Most frequently spoken at home?	657	088	183	072
14. Most frequently read at home?	267	051	357	325
15. Most frequently written at home?	339	014	255	392
16. Most frequently spoken with fellow workers?	137	049	137	677
17. Most frequently spoken with supervisor?	046	009	264	680
18. Most frequently spoken with clients/custs?	032	014	035	919
19. Language of instruction in school?	339	237	167	257
20. Language liked most (conversation)?	362	285	186	167
21. Language of priest's/minister's sermon?	452	137	193	206
22. Language of silent prayer?	469	123	151	257
23. Language of church service?	427	160	193	220

*Percents carried to 3 places, decimals omitted

Table 2 continued

On a re-interviewed sample of 124 cases the distributions obtained were practically identical to those shown above, indicating that the marginals reported above are quite stable.

The language replies to the census have been subjected to a factor analysis (verimax orthogonal rotation). The following 5 factor solution appeared to be most revealing:

No.	Suggested factor name	Items (Loadings)
I	Spanish: literacy	4(93), 3(92), 15(89), 12(88), 11(87), 19(71), 14(70), 20(54)
II	English (oral and written)	7(89), 6(88), 5(84), 8(82)
III	Spanish: oral	9(78), 1(71), 2(66), 10(63), 13(38)
IV	Spanish: at work	18(79), 16(73), 17(55)
V	Spanish: in religion	21(93), 23(89), 22(40)

the results of the factor analysis (shown below the Table). If domains are more than the investigator's etic reclassification of situations then they should also become apparent from factor analysis which in essence asks: which items tend to be answered in a consistent fashion. Of the five domains extracted from this analysis, all four domains considered appropriate for census questioning (language in the context of family, education, work and religion) appeared as separate factors, namely, I. Spanish: Literacy (=education), II. Spanish: Oral (=family), IV. Spanish: at work, and V. Spanish: in religion. In addition, an English factor also appeared indicating that although English is not specifically a domain associated for the population as a whole (it is so associated for children as we will soon see) it is also not displacively or transitionally related to Spanish. An orthogonal English factor indicates that (as in other speech communities marked by relatively stable and widespread bilingualism) there is no need for one language to be learned or used at the expense of the other in the population under study.[8]

A third (and, for this presentation, final) indication of the construct validity of domains as analytic parameters for the study of large scale sociolinguistic patterns is yielded by Edelman's data (1968). Here we note that when the word naming responses of bilingual Puerto Rican children in Jersey City were analyzed in accord with the domains derived from Greenfield's and Fishman's data reported above significant and instructive findings were obtained.

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[8] For other accounts of language censuses and the research problems which they pose see Kloss (1929) and Lieberson (1966).

The most Spanish domain for all children was "family" (Table 3A). The most English domain for all children was "education". The analysis of variance (Table 3B) indicates that not only did the children's responses differ significantly by age (older children giving more responses in both languages than did younger children), by language (English yielding more responses than did Spanish), and by domain (church yielding fewer responses than did any other domain), but that these three variables interact significantly as well. This means that one language is much more associated with certain domains than is the other and that this is differentially so by age. This is exactly the kind of finding for which domain analysis is particularly suited. Its utility for inter-society comparisons and for gauging language shift would seem to be quite promising.

The Integration of Macro- and Micro- Parameters

The situational analysis of language and behavior represents the boundary area between micro- and macro-sociolinguistics. The very fact that a baseball conversation "belongs" to one speech variety and an electrical engineering lecture "belongs" to another speech variety is a major key to an even more generalized description of sociolinguistic variation. The very fact that humor during a formal lecture is realized through a metaphorical switch to another variety (Blom and Gumperz, 1966) must be indicative of an underlying sociolinguistic regularity, which obtained before the switch occurred, perhaps of the view that lecture-like or formal situations are generally associated with one language or variety whereas levity or intimacy is tied to another. Without such a view, without a more general norm

Table 3A: Mean number of words named by young schoolchildren (Edelman, 1968)

(N = 34)

Age	Language	Domain				
		Family	Education	Religion	Friendship	Total
6-8	English	6.2	8.2	6.6	8.3	7.3
	Spanish	7.6	6.2	5.8	6.4	6.5
	Total	6.9	7.2	6.2	7.4	6.9
9-11	English	11.7	12.8	8.7	10.9	11.0
	Spanish	10.5	9.4	7.2	9.7	9.2
	Total	11.1	11.1	7.9	10.3	10.1
Total	English	9.0	10.5	7.7	9.6	9.2
	Spanish	9.0	7.8	6.5	8.0	7.8
	Total	9.0	9.1	7.1	9.0	8.5

Table 3B: Analysis of variance of young schoolchildren's word-naming scores

Source	df	Mean Square	F_{95}	F_{95}	F_{99}
Between Subjects	33				
C (age)	1	689.30	19.67**	4.17	7.56
D (sex)	1	15.54	.44	4.17	7.56
CD	1	87.87	2.51	4.17	7.56
error (b)	30	35.05			
Within Subjects	235				
A (domain)	1	123.13	11.11**	4.17	7.56
B (language)	3	64.18	9.30**	2.71	4.00
AB	3	21.71	6.66**	2.71	4.00
AC	3	20.51	2.97*	4.17	7.56
AD	3	.96	.14	4.17	7.56
BC	1	16.50	1.49	2.71	4.00
BD	1	42.08	3.80	2.71	4.00
ABC	3	8.00	2.45	2.71	4.00
ABD	3	2.23	.68	2.71	4.00
ACD	3	4.51	.65	4.17	7.56
BCD	1	14.62	1.32	2.71	4.00
ABCD	3	2.66	.82	2.71	4.00
error (w)	207				
error_1 (w)	89	6.90			
error_2 (w)	29	11.08			
error_3 (w)	89	3.26			
Total	268				

**Significant at or above the .01 level.

* Significant at or above the .05 level.

assigning a particular topic or situation, as one of a class of such topics or situations, to one language rather than to another, metaphorical purposes could neither be served nor recognized.

As with all constructs (including situations, role-relationships and speech events), domains originate in the integrative intuition of the investigator. If the investigator notes that student-teacher interactions in classrooms, school corridors, school auditoriums and school laboratories of elementary schools, high schools, colleges and universities are all realized via H as long as these interactions are focused upon educational technicality and specialization, he may begin to suspect that these congruent situations all belong to a single (educational) domain. If he further finds that incongruent situations involving an educational and a non-educational ingredient are, by and large, predictably resolved in terms of H rather than L if the third ingredient is an educational time, place or role-relationship, he may feel further justified in positing an educational domain. If informants tell him that the predicted language or variety would be appropriate in most of the examples he can think of that derive from his notion of the educational domain, whereas they proclaim that it would not be appropriate for examples that he draws from a contrasted domain, and, finally, if the construct helps clarify and organize his data, and, particularly if it arises as a compositing feature of his data--then the construct is as usefully validated as is that of situation or event--with one major difference.

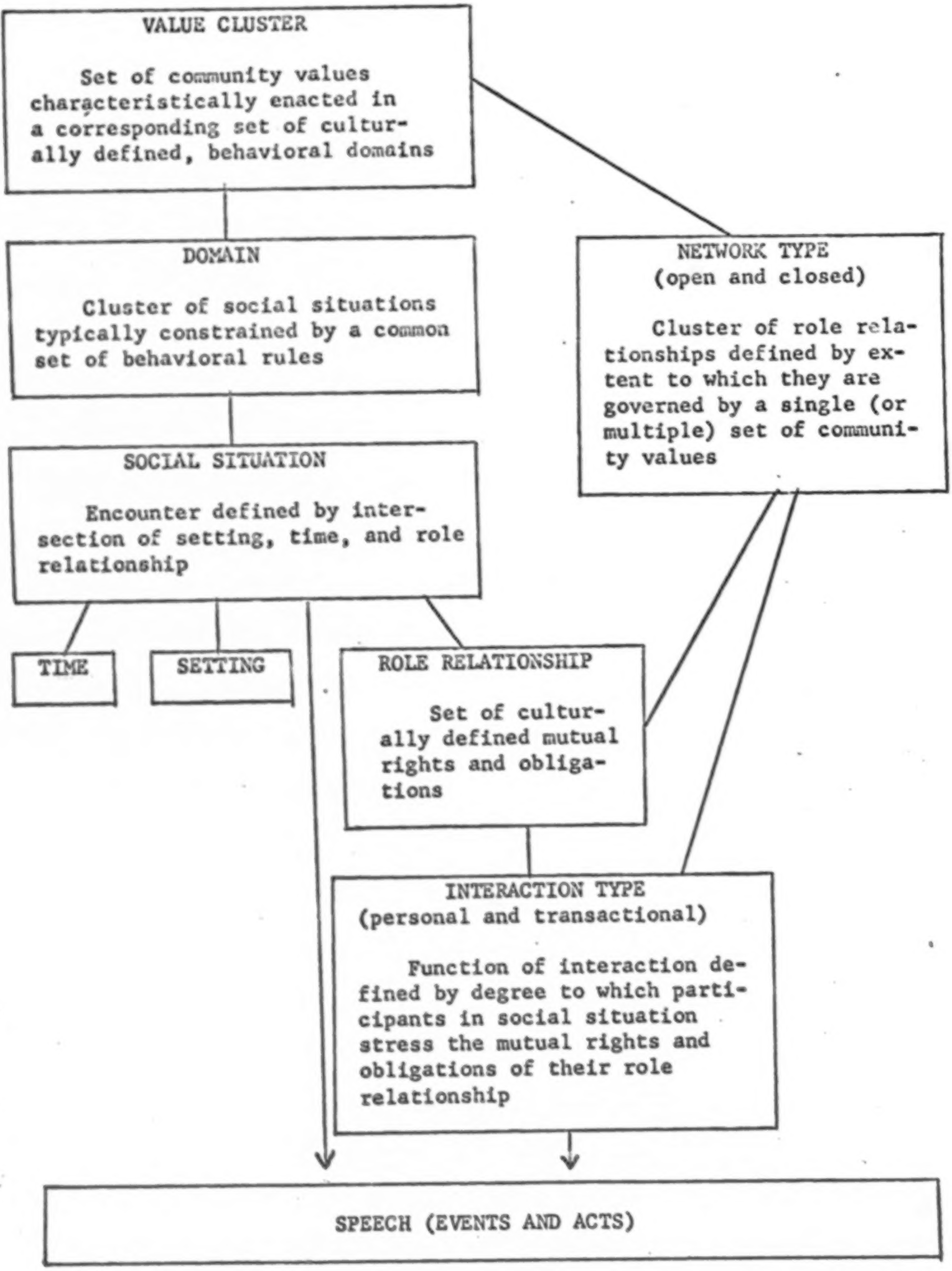
Whereas particular speech acts can be apportioned to the speech events and social situations in which they transpire (Hymes, 1967), the same cannot be done with respect to such acts in relation to societal domains. Domains are extrapolated from the data of "talk" rather than being an actual component of the process of talk. However, domains are as real as the very social institutions of a speech community and, indeed, they show a marked paralleling with such major social institutions (Barker, 1947) and the somewhat varied situations that are congruent with them. There is an undeniable difference between the social institution, "the family", and any particular family, but there is no doubt that the societal regularities concerning the former must be derived from data on many instances of the latter. Once such societal regularities are formulated they can be utilized to test predictions concerning the distributions of societally patterned variation in "talk".

Thus, domains and social situations reveal the links that exist between micro- and macro-sociolinguistics. The members of diglossic speech communities can come to have certain views concerning their varieties or languages because these varieties are associated (in behavior and in attitude) with particular domains. The H variety (or language) is considered to reflect certain values and relationships within the speech community, whereas the L variety is considered to reflect others. Certain individuals and groups may come to advocate the expansion of the functions of L into additional domains. Others may advocate the displacement of L entirely and the use of H solely. Neither of these revisionist views could be held or advocated without recognition of the reality of domains of language-and-behavior (in terms of existing norms of communicative appropriations) on the part of members of speech communities. The High culture values with which certain varieties are associated and the intimacy and folksiness values with which others are congruent are both derivable from domain-appropriate norms governing characteristic verbal interaction.

There are several levels and approaches to sociolinguistic description and a host of linguistic, sociolinguistic and societal constructs within each (Figure 1). The choice among them depends on the particular problem at hand. This is necessarily so. Sociolinguistics is of interest to students of small societies as well as to students of national and international integration. It must help clarify the change from one face-to-face situation to another. It must also help clarify the different language-related beliefs and behaviors of entire social sectors and classes. It must be as useful and as informative to sociologists pursuing inter-societal and intra-societal topics as it is to linguists pursuing more contextualized synchronic description.

It would be foolhardy to claim that one and the same method of data collection and data analysis be utilized for such a variety of problems and purposes. It is one of the hallmarks of scientific social inquiry that methods are selected as a result of problem specifications rather than independently of them. Sociolinguistics is neither methodologically nor theoretically uniform. Nevertheless, it is gratifying to note that for those who seek such ties the links between micro- and macro- constructs and methods exist (as do a number of constructs and methods that have wide applicability through the entire range of sociolinguistics). Just as there is no societally unencumbered verbal interaction so are there no large scale relationships between language and society that do not depend on individual interaction for their realization. Although there is no mechanical part-whole relationship between them, micro- and macro-sociolinguistics are both conceptually and methodologically complementary.

Figure 1: Relationships Among Some Constructs Employed in Sociolinguistic Analysis*


VALUE CLUSTER
Set of community values characteristically enacted in a corresponding set of culturally defined, behavioral domains
DOMAIN
Cluster of social situations typically constrained by a common set of behavioral rules
NETWORK TYPE
(open and closed)
Cluster of role relationships defined by extent to which they are governed by a single (or multiple) set of community values
SOCIAL SITUATION
Encounter defined by intersection of setting, time, and role relationship
TIME
SETTING
ROLE RELATIONSHIP
Set of culturally defined mutual rights and obligations
INTERACTION TYPE
(personal and transactional)
Function of interaction defined by degree to which participants in social situation stress the mutual rights and obligations of their role relationship
SPEECH (EVENTS AND ACTS)

*From: Robert L. Cooper, How can we measure the roles which a bilingual's languages play in his everyday behavior? In (Proceedings of The International Seminar on the) "Measurement and Description of Bilingualism," Wm. Mackey (ed.), Ottawa, Canadian Commission for Unesco, 1968. In press.

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Chapter
VII-4

THE DESCRIPTION OF SOCIETAL BILINGUALISM*

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1. Thesis

Current advanced thinking concerning societal bilingualism--such as that which marked our discussions on this topic during the Moncton Seminar--clearly represents a break with traditional models. Those models viewed societal bilingualism as an inter-group phenomenon resulting from the contact between essentially separate monolingual groups. Given this thesis the basic sociological task was to contrast bilingual "middlemen" with their respective monolingual compatriots to determine when and why the "other tongue" (L_2) was employed and to predict the rate of shift to a monolingual status, the latter being considered the only natural and stable basis of social interaction. Psychological and linguistic research were also held captive by this thesis. Psychologists concentrated on measures of how well L_2 was mastered (i.e., how quickly, how correctly, how complicatedly), since bilingualism was viewed as basically "unnatural" and, therefore, some "price" had to be discovered, some toll had to be revealed in comparison with monolingual normality. Linguists too joined in the hunt and found evidence of "interference" at every level: phonetic, lexical, grammatical and semantic. The natural state of languages was supposedly one of pristine purity and separation. Bilinguals forced languages into unfortunate intercourse and it was unlikely, indeed, to find that no "damage" had been done to either or both.

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*In press, in The Description and Measurement of Bilingualism, Wm. Mackey, ed., Ottawa, Canadian National Commission for Unesco, 1968, (Proceedings of an International Seminar held in Moncton, Canada, June 6-14, 1967).

It seems clear to me that the thesis which consciously or unconsciously guided so much past research on bilingualism in general, and on societal bilingualism in particular, was, in large part, a result of erroneous generalization from limited Western experience. Bilingualism was confused with some of its atypical concomitants: large scale immigration and other social or personal dislocations related to disharmonious intergroup contacts. The acculturating immigrant or his offspring, the Westernizing "native", the struggling "foreign language" student, the downtrodden but dedicated "minority group" patriot, these were the bilingual subjects on whom bilingual research and bilingual theory were based. The notion of widespread, stable, intra-group bilingualism (such as exists even today in over half of the world) was unrepresented in the work on societal bilingualism and, as a result, that work was simultaneously sterile and less than accurate.

2. Antithesis

Our discussions concerning societal bilingualism at Moncton showed how far the pendulum has swung from the initial (conscious or unconscious) theses of bygone years. Instead of being viewed as the temporary or transitional consequence of separate, monolingual societies "in (unfortunate) contact", societal bilingualism is now viewed as a (possibly) stable and widespread phenomenon in its own right. Instead of searching for the differences between bilingual "middlemen" (be they students, elites, traders, assimilators, etc.) and their "more normal" monolingual compatriots modern sociolinguistic research on bilingualism seeks to determine which members of a bi- (or multi-) lingual society employ which variety (from among a whole repertoire available in the bilingual community) in which functional context. Membership in a bilingual society is viewed as no different from membership in any tongue, in that it results in norm-regulated communicative interaction such that certain usage is considered appropriate (and is, therefore, effective) in certain contexts. Indeed, it is because of this basic similarity between societies marked by widespread and stable bilingualism, on the one hand, and monolingual societies on the other, that it is felt that the study of societal (intra-group) bilingualism should be of interest to all students of societal interaction. Since the markers of differentiable varieties (the relative frequencies with which given linguistic variables are realized in particular ways) are somewhat more easily recognizable in bilingual than in monolingual societies the differentiable contexts of social interaction (intersections between specifiable role-relationships, locales, topics and purposes) may also become more recognizable. Thus, those scholars concerned with social process analysis per se, or with the functional demarcation of structural groupings (age groups, occupational groups, educational groups, ethnic groups, religious groups, etc.) may well be attracted to the study of societal bilingualism as an arena which offers easier access to theoretical and methodological clarifications of all-pervading significance.

A very similar coulterpart position describes the antithesis linguistic view of bilingualism. Instead of "witch-hunting" for bilingual interferences modern sociolinguistics recognizes the linguistic repertoires of bilingual speech communities as an instance of the repertoires that characterize all functionally diversified speech communities. Indeed, it is because of this basic similarity that the differentiation of the linguistic repertoires of bilingual speech communities should be of interest to all students of modern descriptive linguistics. Sociolinguistic differentiation may be more recognizable in most bilingual than in most monolingual repertoires and, as a result, the study of bilingual repertoires may contribute to the solution of basic theoretical and methodological problems facing modern linguistics as a whole.

My, how the worm has turned! However, as with all intellectual revolutions (and modern sociolinguistics is such for both of the parent disciplines involved) the antithesis view of societal bilingualism is marked by certain excesses. These are accidents of intellectual history which derive--as did the thesis model--from the societal and disciplinary problems which happened to co-occur with the rise of modern sociolinguistics itself.

3. Critique

In correcting or counteracting the biases and limitations of the classical ("thesis") approaches to societal bilingualism the modern sociolinguistic "antithesis" reveals a number of unjustifiable (and unnecessary) biases of its own:

a. At one level the objection to the reality of groups ("groups do not behave; individuals behave. Groups are frequently no more than constructs of the social scientist") merits no particular attention. Social psychology and sociology were forced to demonstrate the reality of groups quite early in their development and this demonstration continues to be performed successfully whenever the consequences of grouping are revealed. The "antithesis" discovery that some groups are structural or analytic devices of the scientist's own making whereas others are functionally real "out there" ("real communities are aggregates whose members exchange messages frequently and who share norms for the interpretation of messages") is truly touching but sadly anticlimactic for anyone who is aware of the intellectual history of sociology, social psychology or political science. The differences between structuralism and functionalism cannot be fruitfully examined on the grounds of "reality", but, rather on the grounds of their contrastive contributions to particular problems to be investigated and answered.

Thus, the only reason why the "antithesis" objection to the reality of groups needs to be taken seriously at all is that it may, in its iconoclastic blindness, make it impossible for sociolinguistics to do that which it is best fitted to do: describe and measure societal bilingualism. To define groups out of existence, to fail to describe functional groups merely because of theoretical bias with respect to structural groups, to fail to seek out the web between process and structure and thereby constantly improve the formulation of structural grouping is to resign from a responsibility rather than to face it responsibly.

b. The reluctance to struggle with structural grouping, and, indeed, the reluctance to consider functional groups to represent the same level of reality as individual functioning, is related to another atomistic excess of "antithesis" sociolinguistics in relation to bilingualism (as well as in relation to other sociolinguistic concerns).

"Antithesis" sociolinguistics is faced by the Heisenberg-like dilemma of seeking to describe synchronic systems so accurately that all else is lost sight of: first and foremost, a parsimonious approach to the notion of linguistic repertoire.

Initially the construct of "language" was successfully revealed to be an "abstraction" covering a repertoire of varieties, each with contextually appropriate social meanings. Subsequently the construct "variety" has been attacked for being merely an "abstraction" covering a constantly varying range and frequency of realizations of particular phonetic and syntactic "variables". As a result, it is no longer deemed sufficiently refined or accurate to designate the languages or varieties employed in a bilingual setting, since any such designation represents an inevitable grouping or lumping in contrast to the ultimate descriptive finesse currently attainable in describing differential realizations of "variables" considered one at a time.

A similar reluctance characterizes the approach of "antithesis" sociolinguistics to the question of *when* particular varieties are employed in bilingual societies. The opposition to structural categories leads to a basic reliance on purported interpersonal meanings. Changed frequencies and ranges of variable-realizations are related to phenomenologically experienced changes in situations or to phenomenologically experienced changes in metaphors (humor, contrast, emphasis, etc.). Just as there is reluctance to engage in grouping risks in designating populations and in designating codes so is there a hypersensitivity to designate the *kinds of contexts* (situational environments that have societal relevance) in which designated *kinds of societal members* utilize designated varieties.

The "antithesis" sociolinguistic approach to societal bilingualism is micro-process-oriented with such a vengeance that it not only cannot parsimoniously cope with nomothetic formulations and macro-structure problems but it also defines these formulations and problems as unreal and non-existent. As a result, it often fails to objectify its findings in the sense of reporting frequencies of occurrence or non-occurrence of whatever it is that is being studied ("dependent variable") in precisely defined kinds of individuals, situations or codes. Some high-priests of antithesis sociolinguistics have resigned from the replicability goals of social science in pursuit of a fuller understanding of momentary interpersonal subtlety. Clinical sociolinguistics is at hand!

c. A final excess of sociolinguistic antithesis thinking as it applies to the measurement and description of societal bilingualism is its lack of interest (if not active opposition) with respect to attitudinal factors. This opposition has a long prior history in linguistics proper where what an informant actually says rather than what he thinks he says (or what he thinks about what he says, or what he thinks he should say) is the only matter of interest. The antithesis opposition to recognizing cognitive-affective self-regulation of usage also has prior social anthropological origins in that the dominant style of research in that field is one of participant and non-directive observation in small communities of very ordinary, unmobilized, "unspoiled" membership. Most directly, however, the reluctance to recognize self-regulation (and self-monitoring or self-report), or to study those social networks in whose bilingualism such factors are most marked, is derived from the prominence of these very factors and these very populations in the earlier work on intergroup bilingualism against which much of sociolinguistics has revolted.

As with the other excesses with which the sociolinguistic revolution has confronted the study of societal bilingualism the reluctance to engage in attitudinal, ideological and self-report inquiry strikes at a worthwhile point. Much earlier work on societal bilingualism (indeed, much of the earlier work in which I myself have engaged) is probably overly removed from the primary data of actual speech because of its well nigh exclusive preoccupation with self-report. However, if such work failed to examine the relationship between language attitudes, ideologies and actual language behavior and, furthermore, if such work dealt almost exclusively with sub-populations selected because of their particular suitability with respect to the one-sided methodology employed, these very same charges are now equally (though oppositely) true of the antithesis approach to the study of societal bilingualism.

As a result of its insistence on deriving the speech norms of a bilingual society and its reluctance to study those (teachers, writers, politicians, students and other sophisticates) who can verbalize these norms and possibly guide their own language behavior (and that of others) consciously, the antithesis approach to societal bilingualism cuts itself off from studying important segments of many bilingual societies. It is false to suppose that only intergroup bilinguals or "cultural bilinguals" show little switching (due to their more frequent "middleman" role vis-a-vis monolinguals). It is false to suppose that language ideologies and movements arise only as a result of the encounters between conflicting monolingual populations.

Indeed, without studying the ideologically more mobilized segments of bilingual societies where such obtain (and they are not necessarily seeking to disturb the existing functional allocation or variation of codes), and without contrasting their bilingual attitudes with their bilingual behaviors in a whole host of contexts, no valid societal description can be attained.

It is as harmful for the study of societal bilingualism to ignore attitudes/ideologies as to overemphasize them. As with the other two factors mentioned above (opposition to societal-grouping and opposition to code-grouping) the antithesis approach to the role of attitudes and self-report in societal bilingualism has gone too far and has wound up throwing out the baby with the bath water.

4. Synthesis

Both microsociology and macrosociology represent long and fruitful lines of inquiry and it would be a pity if the study of societal bilingualism were not to develop so as to benefit from both, or, at the very least, so as to benefit from whichever of the two happened to be more appropriate to the variety of problems clamoring for attention. The "antithesis" approach that was so fully examined during our deliberations at Moncton is related in its origins and predilections to the current rejuvenation of microsociology under the general label of ethnomethodology. Ethnomethodology seeks to discover the rules by which members of a social order carry out their practical, everyday activities. The members of a social order have knowledge of these rules but, for most of them, it is knowledge-in-use rather than knowledge that is ideologically or otherwise consciously organized and available for accurate and coherent self-report. One of the tasks of ethnomethodology is to discover (and then to formally describe) the rules that organize "talk" in society. As a result of its basic concern with the everyday rounds of societal behavior in general and its interest in "talk" or conversations in particular (and the relationship between "talk" and other common social behaviors) ethnomethodology obviously contributes not only a welcome but a necessary approach to the study of societal bilingualism.

The past decade has also witnessed a revival of interest in macrosociology with its emphases on the structure of total societies as well as on their relationships and contrasts or similarities to each other. In macrosociology the processes of social interaction continue to remain of paramount interest but they can no longer be analyzed or comprehended without recourse to social structure. Since its task is (frequently) the characterization of entire nations (rather than only of particular face-to-face interaction networks) macrosociology faces a very complex task and one admittedly surrounded by methodological problems. In struggling with its problems macrosociology frequently makes use of comparative data and draws upon a greater variety of data than is necessary for ethnomethodological work. At its best--i.e., when it is most penetrating and stimulating--macrosociological research draws upon historical records (including law-codes), qualitative impressions, demographic data, attitude and opinion data, behavioral surveys purposely located in terms of a stratified sampling plan, etc. Rather than being at loggerheads with microsociology (including, but not limited to ethnomethodology) macrosociology must constantly pursue sure roots at lower-order levels of analysis, otherwise its structural and stratificational categories will be erroneously derived and its findings unenlightening or misleading. Because sociology also needs to be able to comprehend and compare societies and nations as "wholes", because some attributes of societies (and of modern societies in particular) manifest themselves at no other level as clearly as at the national level (e.g., national mobilization and integration), it would be a pity, indeed, if the study of societal bilingualism (or of other sociolinguistic concerns) were so constrained as not to be able to proceed along macrosociological lines.

The study of societal bilingualism is currently an exciting, vigorous area of inquiry for investigators in various countries working in various intellectual traditions. This being the case, I am sure that the next decade will witness many investigations of the kinds that were underrepresented in our deliberations at Moncton. We need studies of societal bilingualism that do not get so lost in the minutia of description (in terms of any current equilibrium model) that they are unable to demonstrate changes in the bilingual pattern as a result of social change. (I underscore demonstrate to emphasize that I do not mean "anecdotal commentary", initially provocative though that may be.) We definitely need studies that contrast intellectual and ideologized groups with more ordinary members of national societies at various stages of modernization. There must certainly be studies of societal bilingualism under stress. There must also be studies that seek a rapprochement with the older tradition of research on intergroup bilingualism since societal bilingualism is not always (and, perhaps, not even usually) entirely of one kind or the other. Degree of mastery is frequently of importance in bilingual societies, particularly when language maintenance or language shift are highlighted in the process of internal political, economic and cultural conflict.

The study of societal bilingualism is now both too vital and too mature to be long delayed and misled by sectarian biases. It will doubtlessly select what is best from all theoretical and methodological traditions and, in this process, contribute to their enrichment as well.

Part VIII

APPENDICES

Appendix VIII-1

SOME THINGS LEARNED; SOME THINGS YET TO LEARN

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1. Some Things Learned

a. The adequacy (and, frequently, the superiority) of self-report measures of bilingual proficiency and bilingual usage--when rather global or summary criteria like those that we have utilized are acceptable--is well documented in this report. Populations that lack any particular ideologized awareness of their proficiency and usage are still able to reply to sociolinguistically significant queries in substantially reliable and valid ways. The purposes of self-report measures are normally quite apparent to such respondents. The validity of their responses probably depends as much on their desire to accurately describe their self-image as bilinguals as upon their self-monitoring insight. Somewhat less transparent self-report measures (e.g., WFE) are reasonable substitutes for more obvious survey instruments but are not as easily designed to yield both proficiency and usage scores.

b. Domain analysis is a fruitful middle range approach to the description of societal patterns of bilingual proficiency and bilingual usage. It is neither as abstract nor as removed from the contexts of verbal interaction as are value clusters nor is it as impossibly detailed and fleeting ("impossibly" from the point of view of research on human aggregates larger than the face-to-face group) as the situation. Domain analysis has proved to be useful and reliable in conjunction with self-report measures and performance measures, usage data and proficiency data, a priori scores and empirical scores, sociological data and psychological data. It has clarified the difference between social units that locate the immediate context of speech acts and speech samples per se and social units that are derivative from aggregate data on speech acts and speech samples. Domain analysis attempts to relate social structure to social process in sociolinguistics by deriving domains--which are themselves alien to societal institutions or structures--from obviously congruent social situations. Domains are constructs that should prove useful to future sociolinguistic research that is primarily concerned with large scale social change rather than with contextualized linguistic description for its own sake.

Domain of societal interaction seems to be no more an abstraction from reality than "language." It is an abstraction that many bilinguals handle easily and consistently. It corresponds closely to the way many bilinguals think of their language-choice regularities. Domains do not contradict the reality of metaphorical switching but rather provide the normal ground against which metaphor can be recognized as such.

c. On the basis of our experience, the promise of compositing methods of data analysis definitely seems to be great in connection with future sociolinguistic research. This is particularly so in connection with sociologically oriented data on the one hand and linguistically oriented data on the other. In the former case the R factors provided sensible confirmations as well as emic refinements of a priori domains, whereas the Q clusters provided eminently reasonable and meaningful groupings of behaviorally consistent (and, simultaneously, behaviorally contrasted) individuals. However, in both of these connections R and Q analysis merely confirm their prior and documented functions in social science research. In the realm of our linguistic data their services were both more novel as well as more fundamental. Here they demonstrated the possibility of deriving sociolinguistic varieties and sociolinguistic networks in much more rigorous and in much more exhaustive ways than had hitherto been attempted or thought to be possible.

The factor analytic demarcation of sociolinguistic varieties is based directly upon the notion of demonstrated co-occurrences across elicitation or realization contexts. The factor analytic demarcation of sociolinguistic networks is based upon the maximization of within-cluster similarities plus between-cluster differences. Thus, whereas the demarcation of varieties is fully in accord with prior theoretical notions the demarcation of networks represents an improvement over such prior notions and their concern with density of communication (rather than with within-group similarity and between-group contrast) as useful boundary-defining notions. Obviously, this departure is both more emic (in the sense of being empirically consequential) as well as more parsimoniously applicable to data from larger numbers of speakers (not all of whom need be in face-to-face interaction).

d. The feasibility of utilizing a mini-kit in future sociolinguistic descriptions of large populations appears to be well documented on the basis of our experience. This is not at all to say that our particular mini-kit can be transferred, in whole or in part, from our study context to any other. It is to say, however, that sufficient time per subject spent in studying a smaller population intensively can provide the information needed so as to fruitfully spend less time per subject in studying similar but much larger populations. This is a most promising lead since it implies that more time can be available in the future for work on other sociolinguistic parameters than those that we were able to emphasize in the present project. Nevertheless, it is instructive to note that even the most parsimonious mini-kit that we could devise for the range of criteria we considered essential did not turn out to be disciplinarily monistic. Genuinely interdisciplinary work is needed for sociolinguistic description. Without such work sociolinguistics becomes a disciplinary diversion rather than a realistically problem-centered pursuit.

2. Some Things Yet to Learn

a. Given the obvious utility of self-report measures such as those designed for the present study, in conjunction with the kinds of criteria here employed, how much further can both these instruments and these criteria be refined? This question deserves exploration at two levels: (1) at the level of structurally or institutionally relevant measurement which deals with quite global and structured behaviors, and (2) at the level of more process-oriented measurement which deals with more fleeting, more subtle, and more minute behaviors. Can most (or at least some) respondents reply accurately to questions concerning metaphorical and situational switching?, concerning intra-language rather than merely inter-language switching?, concerning personal and transactional interactions?, concerning their open and closed network behaviors?, concerning role repertoire and linguistic repertoire ranges? We have little experience with how such questions should be put and less with how reliable or valid the answers to them may be for particular population segments.

A further extension of this point deals with behavioral (role repertoire, role relationship, etc.) explorations and even with detailed linguistic inquiries concerning the realization of values of diverse variables. What are the limits of self-report for various kinds of speech networks?

b. Our methods for deriving and validating domains are still exceedingly rough. In this project they were primarily based upon hunches stemming from extensive participant observation and from reviews of the literature. That these hunches were frequently rather good is illustrated by the number of times in which empirically composited (i.e., factor analytically based) scores proved to be domain scores. However, this was not always the case and we do not at this moment know why certain instruments did yield empirical domain scores whereas others did not. Domains do not seem to be too distant from the ways in which ordinary informants view their own behavior. Domain based questions seem meaningful to ordinary respondents and elicit reliable and seemingly valid responses from them. This may be why self-report and usage measures showed a somewhat greater tendency to yield domain-related empirical scores than did performance and proficiency meausres.

Further efforts might usefully try to refine and revise domain specifications by constructing and cross-validating domain measures on the basis of prior data analysis (rather than merely on the basis of sociological insight). Had our project had another year to run this is exactly what it would have attempted, selecting some self-report measures (that seemed to benefit so much from domain analysis) as well as some performance measures (that did not seem to benefit as greatly from domain analysis) for such further inquiry.

c. Given the substantial contributions of R and Q analysis two less than fully satisfactory outcomes must be admitted for future clarification. The first, a sin of commission, deals with the relative meaninglessness of many of the R factors derived from psychologically oriented studies. It is not at all clear whether this was a byproduct of our particular instruments and the data they yielded or whether there is a more general lesson to be learned here with respect to the potential contribution of empirical compositing methods for the analysis of psychologically oriented sociolinguistic measures.

Our second disappointing outcome is a sin of ommission which might well have been avoided had not time run out on us, namely, the lack of a direct, quantitative indication of accentedness and of repertoire ranges for each subject. The precise linguistic realizations from which scores dealing with these matters should have been extracted were utilized in the R and Q analyses of our linguistic data. These very same realizations might have been further analyzed in purely quantitative terms in order to yield for each individual an accentedness score, a Spanish repertoire range score and an English repertoire range score. These scores would have been superior (because derived from more detailed and from more objective data) to the judgments that were finally used in connection with these criteria, although the judgments had their fully justified role to play in our research design.

In an initial study it is good to show that hitherto unfamiliar quantitative and objective treatments of data add up to make good impressionistic and judgmental sense. However, once these initial feelings of uncertainty are assuaged it should prove possible to proceed directly with the most precise data available and this we did in every instance except in connection with the criterion scores themselves.

d. The four aspects of societally relevant sociolinguistic description that still seem to require most attention in the immediate future are: (1) role repertoire range measurement and description--to which we paid little attention in terms of instrument construction or general methodological-theoretical clarification, (2) perfection of field methods for inter-language performance measures paralleling (in depth) the intra-language measures developed in the current project, (3) direct application of sociolinguistic description to pedagogically relevant concerns--of which we were aware but to which we could not give explicit attention, and (4) encompassing description of a full range speech community rather than of a delimited range neighborhood. A model study of the latter kind is particularly needed now that sociolinguistic surveys of entire countries or regions are coming into fashion. While our project has much to contribute to such surveys even as it stands it was too focused on a lower-class population to be greatly instructive in connection with the sociolinguistic description of more fortunate, more literate and more linguistically conscious populations which also deserve and require careful study.

Appendix VIII-2

INSTRUMENTS AND CODE SHEETS

[INTERVIEW SCHEDULE:

PUERTO RICAN ARTISTS, LEADERS, INTELLECTUALS (ALI)]

1. Biographical

1.1 Name____________________

1.1.1 Age____________________

1.1.2 Sex____________________

1.1.3 Address____________________

1.1.4 Telephone____________________

1.2 Where born____________________

1.2.1 When arrived in N.Y.____________________

1.2.2 When/where learned English (a)__________ (b)__________

" " " Spanish (a)__________ (b)__________

1.3 Education____________________

1.3.1 Occupation____________________

1.3.2 re work: (a) Do you feel that the work you are doing corresponds to your interests and training?__________

(b) If you had any choice would you stay in your present job or choose another?__________

1.3.3 re financial security: On the whole, are you satisfied with your current financial position (income level)?_____

1.3.4 re housing: How well satisfied are you with your current housing (Planning for home ownership? larger quarters? better quarters?)____________________

1.4 Skin Color:	Dark				Light
(rating)	5	4	3	2	1

2. Language

2.1 Did you speak English/Spanish with anyone (A Puerto Rican) yesterday and today?

2.1.1 To whom? Where? What about?

2.1.2 Is that the only thing you would talk to him about in S/E?

2.1.3 Is that the only language you talk to X in?

2.1.4 If "no" tell me about a time when you spoke E/S to him (her).

2.2 Is there any other Puerto Rican (whom you did not meet yesterday or today) to whom you would normally speak in E/S about something or other?

2.2.1 Why do you normally talk to him in E/S?

2.2.2 About what? Where? When?

2.2.3 Is that the only language you talk to X in?

2.2.4 If "no" tell me about a time when you spoke E/S to him (her).

2.3 Are there any Puerto Ricans to whom you try to talk a "better kind" of E/S?

2.3.1 What makes it "better"?

2.3.2 Why do you (try to) talk "better" to him/her? When?

2.3.3 Did you ever forget to talk "better" to him/her?

2.3.4 Is it hard to talk a better kind of E/S?

2.3.5 Have you ever made any attempt to improve your E/S? How did you learn (when, where, from whom)?

2.4 Are there any Puerto Ricans to whom you try to talk a very "folksy" (popular, informal) kind of E/S?

2.4.1 What makes it folksy?

2.4.2 Why do you (try to) talk folksy to them? when?

2.4.3 Did you ever forget to talk "folksy" to him/her?

2.4.4 Is it hard to talk folksy? Is it proper?

2.4.5 How did you learn to talk folksy (when, where, from whom)?

2.5 Do you wish you could talk (an)other kind(s) of E/S than you usually talk?

2.5.1 What is the best kind?

2.5.2 Who speaks it? When? Where?

2.5.3 Why would you like to talk that way? How can you learn?

2.6 Do you want your (grand)children to know Spanish? Why?

2.6.1 Do you think they will know it?

2.6.2 How will they get a chance to learn it? What kind of Spanish will it be?

2.6.3 When and with whom do you think they will use it?

2.6.4 Do you think they will be glad they know it? Why?

2.6.5 Would it tend to spoil their English?

2.6.6 Will they feel differently about knowing it than you do?

2.7 What do you think of American born (or bred) Puerto Ricans who do not speak Spanish?

2.7.1 Are they pretending? Why?

2.7.2 Are there many such? Will their number increase?

2.8 Here are a few sentences in E or in S. Please read them aloud, one by one, and then tell me in your own words what they mean.

(I-3-a and II-3-b)

3. Leisure Activities and Cultural Participation

3.1 Do you read a Spanish daily newspaper? How often? Why?

3.1.1 Do you read an English daily newspaper? How often? Why?

3.1.2 Do you do any other regular reading? In which language? Why?

3.1.3 If you had more time to read, what kinds of things would you like to read most?

3.2 Do you listen to Spanish programs on the radio? How often? Why?

3.2.1 Do you listen to English programs on the radio? How often? Why?

3.2.2 If you had more time to listen to the radio, what (kinds of programs) would you like to listen to most?

3.3 Do you listen to Spanish programs on TV? How often? Why?

3.3.1 Do you listen to English programs on TV? How often? Why?

3.3.2 If you had more time to listen to TV what (kinds of programs) would you like to listen to most?

3.4 When you go out, what Puerto Rican pastimes/amusements do you participate in (e.g., movies, clubs, dancing, church groups)?

3.4.1 When you go out, what American pastimes/amusements do you participate in?

3.4.2 If you had more leisure time (more time to go out)--and didn't have to worry about the expense, what would you enjoy doing (more of)?

4. Being Puerto Rican and American

4.1 ¿Ud. se considera Puertorriqueño? ¿Qué le hace a Ud. ser Puertorriqueño?

4.1.1 ¿Es necesario hacer algo para ser Puertorriqueño?
(creer algo, saber algo, observar algo) o es suficiente
de solo uscer de padres puertorriqueños?

4.1.2 ¿Le gusta a Ud. ser Puertorriqueño o le molesta a vecee?
¿Hay Puertorriqueños que les molesta ser puertorriqueños?

4.1.3 ¿Como es diferente de ser otro tipo de hispano?

4.1.4 ¿Como de importante es de saber Español para ser
Puertorriqueño en Nueva York?

4.2 ¿Hay Puertorriqueños que dan demasiado énfasis de ser Puertorriquene?

4.3 ¿Hay un conflicto entre ser Americano y ser Puertorriqueño?

4.3.1 ¿Es posible combinar los dos?

4.3.2 ¿Es posible desarrollar la cultura puertorriqueña aqui,
en Nueva York?

4.4 When do you feel more at home, when you are among Americans
or when you are among PRs? Why?

4.5 Ideally, if you had no financial problems to worry about,
would you prefer to live in Puerto Rico or the U.S.A.? Why?

(II-3-a and II-3-b)

NAME

ADDRESS

INTERVIEWER

DATE

COMMENTS

Study #	
8	1. Conversations (5)
x4	2. Perception
6	3. WFE
x0	4. WN
0	5. Reading W.L.
0	6. Reading passages
x0	7. WA
7	8. Spanish Usage Rating

CODE: STUDY OF ARTISTS, ORGANIZATIONAL LEADERS AND INTELLECTUALS

Column(s) — Item and Options

Card 1, 1 - 5 Identification of Study (1), subject (2-3-4) and card (5).

6 Sex of respondent: 1 = Male; 2 = Female.

7 Age and yrs. in USA:

	Born USA	-10	11-20	21+
39 or under	1	4	7	0
40 - 59	2	5	8	x
60 - over	3	6	9	y

8 Birthplace: 0 = NR; 1 = USA; 2 = San Juan or any section thereof (Rio Piedras, Hato Rey, Santurce, Puerto Nuevo, Martin Pena, etc.); 3 = Aguadilla, Arecibo, Bayamon, Caguas, Coamo, Fajardo, Guayama, Mayaguez, Ponce: Cities of 10,000 or more inhabitants; 4 = Smaller urban; 5 = Non-urban.

9 Years in USA: 0 = NR; 1 = born in USA; 2 = 5 or less; 3 = 6 - 10; 4 = 11 - 15; 5 = 16 - 20; 6 = 21 and over.

10 Highest Education Attempted: 0 = HR; 1 = Elem (PR); 2 = Elem (USA); 3 = Secondary (PR); 4 = Secondary (USA); 5 = College (PR); 6 = College (USA); 7 = Univ (PR); 8 = Univ (USA).
(Note: Include "other foreign" -- e.g., European -- education under PR if in a Hispanic country and USA if elsewhere).

11 Where English was learned: 0 = NR; 1 = primarily school in PR; 2 = primarily school in USA; 3 = primarily out of school in PR; 4 = primarily out of school in USA; 5 = school and out of school in PR; 6 = school and out of school in USA.

12 Remunerated Occupation: 0 = Community volunteer; 1 = ALI, PR community; 2 = ALI, general community; 4 = non-ALI, PR community (most clients, customers are PR although business/firm is open to all); 8 = non-ALI, general community. (GEOMETRIC)

13 Primary ALI category in PR community: 0 = NR; 1 = graphic or plastic artist; 2 = musician; 3 = writer (including poet); 4 = actor; 5 = singer; 6 = educator (professor, teacher); 7 = organizational leader or community worker.

14 Occupational goal (preference): 0 = NR; 1 = ALI, PR community; 2 = ALI (or professional), general community; 4 = non-ALI, PR community; 8 = non-ALI, general community. (Note: GEOMETRIC code to permit split preferences: anticipate no combination higher than 12. Use 0 for 10, x for 11, y for 12.)

15 Father's highest occupation relative to respondent's remunerated occupation: 0 = NR

	Son:	ALI or Prof.	WC-ST	Unskilled
Father:	ALI or Prof. (a)	1	7	8
	White Collar to (b) Skilled Technician	4	2	9
	Unskilled Labor (c)	5	6	3

(a) category 1 in census study.
(b) categories 2 & 3 in census study.
(c) category 4 in census study.

16 Father's highest formal education attempted: 0 = NR; 1 = none; 2 = elem (1-8); 3 = secondary (9-12); 4 = college; 5 = graduate work.

17 Skin color rating: 0 = NR; 1 = lightest to 5 = darkest.

18 Place of interview: 0 = NR; 1 = FGS; 2 = home of respondent; 3 = place of work of informant.

19-20 Bilingual PRs to whom Spanish was spoken during past two days: 0 = NR; 1 = family; 2 = close friends; 4 = work colleagues; 8 = ILA colleagues (including organizational members); 16 = vendors, service personnel; 32 = neighborhood or other acquaintances. (GEOMETRIC)

21 Spanish only to all of these persons?: 0 = NR; 1 = (Some people) Spanish only; 2 = (Some people) Spanish and English; 4 = (Some people) Spanish only and (others) both Spanish and English. (GEOMETRIC)
Note: Disregard English used when non-Hispanos are present.

22-23 When Spanish to these persons?: 0 = NR; 1 = Usually at all times (when no "English only" persons are present); 2 = Certain topics; 4 = Certain functions (humor, emotion, intimacy, secrecy, respect); 8 = seemingly random switching (can't explain); 16 = formulas (greetings, expressions, hispanic terms rather than topics as a whole). (GEOMETRIC)

24-25 When English to these persons?: 0 = Never, none. Same code as for columns 22-23 except that punch 1 is not applicable and complexity, technicality, etc., must be added to functions (punch 4). (GEOMETRIC)

26-27 Any other bilingual PRs to whom (some) Spanish is usually spoken: Same code as for columns 19-20.

28 Spanish only to all of these other persons?: Same code as for columns 21.

29-30 When Spanish to these other persons?: Same code as for columns 22-23.

31-32 When English to these other persons?: Same code as for columns 22-23 except that punch 1 is not applicable.

33 Any (bilingual) PRs to whom English is usually spoken?: 0 = NR; 1 = none; 2 = Those who are 2nd or 3rd generation (or arrived in USA at very young age) and know little or no Spanish; 4 = those who prefer English although they know Spanish reasonably well. (GEOMETRIC)

34-35 Respondents opinion about speaking Spanish (only, primarily, frequently) to (some) bilingual PRs: 0 = NR; 1 = negative; 2 = positive: ethnic identification (ideological); 4 = positive: (inter) personal authenticity (non-ideological, habitual, natural); 8 = positive: language maintenance (ideological, may be directed toward younger generation in particular); 16 = positive: accommodation to others. (GEOMETRIC)

36-37 Respondents opinion about speaking English (primarily or only) to (some) bilingual PRs: 0 = NR; 1 = negative because indicative of ethnic de/non-identification (Americanization); 2 = negative because non-authentic; 4 = negative because indicative of language shift; 8 = negative because non-accommodative, i.e., indicative of interlocutor's rejection of respondent; 16 = no concern (neutral); 32 = positive. (GEOMETRIC)

38-39 Respondents opinion about speaking Spanish and English to (some) bilingual PRs: 0 = NR; 1 = positive; 2 = negative: indicative of ethnic de/non-identification; 4 = indicative of language shift; 8 = negative: conducive to interference, barbarisms, anglicisms; 16 = no concern (neutral). (GEOMETRIC)

40-41 How would respondent's departure from usual interpersonal pattern be interpreted by interlocutor(s): English only where Spanish (or S + E) is usual (or more English than expected).* 0 = NR; 1 = Would not be noticed or of no concern; 2 = would be interpreted positively; 4 = would be interpreted negatively: ethnic de/non-identification; 8 = would be interpreted negatively: non-authentic, snobish; 16 = negatively: indicative of language shift; 32 = negatively: would be considered non-accommodative (rejection of interlocutor). (GEOMETRIC)

42-43-44 How would respondent's departure from usual interpersonal pattern be interpreted by interlocutor(s): Spanish only where English (or S + E) is usual (or more Spanish than expected).** 0 = NR; 1 = Would not be noticed or would be of no concern; 2 = would be interpreted negatively: nationalistic (ethnic over-identification); 4 = negatively: non-authentic, snobish; 8 = negatively: exaggerate language retentivism; 16 = negatively: non-accommodative (rejection of interlocutor); 32 = positive: ethnic identification; 64 = positive: language maintenance concern or other. (GEOMETRIC)

* Includes Spanish and English where Spanish only is expected.

** Includes Spanish and English where English only is expected.

45-46 To whom is a "better kind" of Spanish spoken by respondent?: 0 = NR; 1 = disclaims using a "better" kind (uses "only one kind"); 2 = to more educated (cultured) interlocutors on particular topics and occasions; 4 = to the more educated (cultured) interlocutors regardless of topic and occasion; 8 = to Spaniards, Latin Americans or others who believe PR's speak Spanish poorly; 16 = to superiors (boss, elders, strangers, students, major professor, etc.); 32 = to intimates on very serious matters. Note: 2 & 4 indicate solidarity with the "better" class; 16 indicates a power differential. (GEOMETRIC)

47-48 What makes it "better"?: 0 = NR; 1 = Don't know; 2 = vocabulary (terminology); 4 = pronunciation/enunciation; 8 = grammar; 16 = esthetic qualities (beauty, imagery, rhythm, poetic qualities, etc.); 32 = purity (non-interference); 64 = disclaims notion of "kinds." (GEOMETRIC)

49-50 To whom is a "folksier" kind of Spanish spoken?: 0 = NR; 1 = disclaims using a "folksier" kind (uses only one kind); 2 = family, friends, equals on most topics and occasions; 4 = to educated (cultured) interlocutors on particular topics and occasions; 16 = to social inferiors on most topics and occasions; 32 = to anyone that uses it.

51-52 What makes it "folksier"?: Same code as for columns 47-48 except that 16 and 32 are negativized (i.e., non-esthetic and lack of purity).

53 Claimed personal repertoire in Spanish: 0 = NR; 1 = disclaims notion of "kinds"; 2 = one: popular, folksy; 3 = one: better, correct; 4 = two (more folksy and more polished); 5 = three (slangy (or jíbaro, or vulgar), folksy, and polished); 6 = four or more.

54 Awareness of varieties vs. claimed repertoire in Spanish: 0 = NR; 1 = disclaims notions of kinds; 2 = Uses all varieties of which aware; 3 = uses fewer varieties than those of which aware and is not particularly interested in learning to use others; 4 = uses fewer varieties than those of which aware and is interested in learning to use others.

55 Attitude toward "cecear": 0 = NR; 1 = no opinion (neutral, don't mind); 2 = negative (stilted); 3 = positive (laudable in proper context).

56 Personal repertoire in English: 0 = NR; 1 = disclaims notion of "kinds"; 2 = one kind: popular, everyday; 3 = one kind: better (polished, more correct than conversational); 4 = two (more folksy and more polished); 5 = three; 6 = four or more.

57 Awareness of varieties vs. claimed repertoire in English: Same code as for column 54.

58 Claimed repertoire in Spanish vs. claimed repertoire in English: 0 = NR;

Span.	Eng. 1	Eng. 2	Eng. 3 or +
1	1	7	8
2	4	2	9
3 or +	5	6	3

59 Do(es) respondent's child(ren) know Spanish? 0 = NR; 1 = none know, speak or understand Spanish; 2 = all understand and speak; 3 = some speak but some merely understand; 4 = all merely understand but cannot speak; 5 = some understand only and some do not even understand; 6 = none understand or speak.

60 Does respondent hope/want prospective children to know Spanish? 0 = NR; 1 = yes; 2 = if they are willing (neutral); 3 = if mate is Spanish speaking and willing; 4 = no.

(Note: column 59 is for those who already have children; column 60 is for those who do not.)

61 Do(es) respondent's grandchild(ren) know Spanish? Same code as for column 59.

62 Does respondent hope/want prospective grandchildren to know Spanish? Same code as for column 60.

63-64 Respondent's (actual and/or intended) practice with own children: 0 = NR; 1 = Speaks Spanish only; 2 = Speaks Spanish as much as possible ($S \geqq E$); 4 = Speaks Spanish a little; 8 = Speaks no Spanish.

Note: GEOMETRIC to permit combination coding for separate children.

65-66 Respondent's (actual and/or intended) practice with own grandchildren: Same code as for column 63-64.

67 Are there large numbers of Neoyorquenos (New York born or bred individuals of Puerto Rican parentage) who do not understand Spanish? 0 = NR; 1 = yes there are; 2 = most can only understand and speak a little; 3 = most can understand and speak without real difficulty (although the kind of Spanish they know is heavily anglicized). 4 = understands everything, speaks poorly.

68-69 Respondents opinion concerning Neoyorquenos who do not understand or cannot speak Spanish: 0 = NR; 1 = neutral, unconcerned; 2 = negative because indicative of personal malfunctioning (family and personal dislocation, insecurity, snobish, materialistic); 4 = negative because indicative of cultural loss (loss of PR literary and high cultural heritage); 8 = negative because of identity loss (loss of identification with the PR people/community); 16 = negative because indicative of loss of ethnicity (distinctive, daily rounds, authenticity, genuineness); (Note: Do not use this item for scoring opinions on why maintenance of Spanish is important; see 98-99). (GEOMETRIC)

70 The long range future of Spanish among Neoyorquenos: 0 = NR; 1 = by and large will lose Spanish (only a small group will maintain; same as other immigrants); 2 = by and large will maintain some familiarity with Spanish but not as much facility or purity as presently; 3 = by and large will maintain Spanish (be bilingual).

71-72 How could the long-range future of Spanish among Neoyorquenos be improved (strengthened)?: 0 = NR; 1 = nothing can be done; 2 = it's up to the parents (i.e., no organized approach is possible or likely); 4 = it's up to the schools, the government or other non-PR bodies; 8 = there are specific programs or goals that the PR community (organizations) can pursue; 16 = nothing needs to be done (all OK). (GEOMETRIC)

73 Does respondent recognize a personal responsibility to strengthen (reinforce) Spanish among Neoyorquenos?: 0 = NR; 1 = no; 2 = willing but not yet ever implemented; 3 = willing but not currently implemented; 4 = willing and currently involved; 5 = willing, currently involved, and eager to devote even more time and effort to this cause; 6 = uncertain.

74 Importance of English for PRs in NY: 0 = NR; 1 = neutral (unconcerned); 2 = unimportant; 3 = important, instrumental; 4 = important, integrative; 5 = important, instrumental, and integrative.

75-76	Why some Neoyorquenos don't know Spanish (well)?: 0 = NR; 1 = family disorientation (both parents work, lack of supervision, parents unsure - unideologized, uneducated - re importance of language); 2 = instrumental shift (youngsters and/or their parents in pursuit of materialistic success); 4 = integrative shift (youngsters and/or their parents seek acceptance by and identification with Americans); 8 = de-identification because of PR reputation for ignorance, violence, crime, etc.; 16 = other pressures of American environment (including school). (GEOMETRIC)
77-78	PR leisure activities and cultural participation of respondent: 0 = NR; 1 = regular newspaper reading (at least twice a week); 2 = frequent other "PR reading"; 4 = regular radio listening (at least once a week); 8 = regular TV listening (once a week); 16 = periodic movie attendance (any Hispanic); 32 = periodic attendance at PR clubs, dances, social groups. (GEOMETRIC)
79-80	Maintenance of daily ethnic behaviors: 0 = NR; 1 = none; 2 = foods; 4 = other daily customs; 8 = holiday customs; 16 = extended family contacts (here and/or in Puerto Rico). (GEOMETRIC)
Card 2	
1- 5	Study number (1), respondent number (2-3-4) and card no (5).
6- 7	American leisure activities and cultural participation: Same code as for columns 77-78 but in conjunction with American rather than PR behaviors. (GEOMETRIC)
8	PR-American comparison: 0 = NR (can't be scored because one or the other component is absent); 1 = equal; 2 = PR> Amer (i.e., geometric score for 77-78 is greater than that for 6-7); 3 = American> PR.
9	Evaluation of PR press, radio, and TV in New York: 0 = NR; 1 = all positive; 2 = all negative; 3 = ppn; 4 = pnp; 5 = npp; 6 = nnp; 7 = pnn; 8 = npn.

10 Reading utopia: 0 = NR; 1 = primarily hispanic (in language or content), including PR (authors or content); 2 = primarily hispanic but no PR; 3 = not primarily hispanic (general technical or cultural reading in English or in any other world language).

11 Other utopias: listening, viewing or other pastimes: Same code as for column 10.

12-13 What makes respondent a PR?: 0 = NR; 1 = does not consider self primarily PR; 2 = birthplace; 4 = PR parentage; 8 = attitudes (feelings, sentiments); 16 = knowledge (re literature, history, traditions, art, culture); 32 = behavior (including but not limited to speaking Spanish). (GEOMETRIC)

14 Was Spanish mentioned among the ingredients of respondent's Puerto Ricanness?: 0 = NR (i.e., 0 in 12); 1 = no; 2 = yes.

15 Are some daily behaviors necessary in order to be a PR? (i.e., practices,customs, daily rounds stamped by ethnicity): 0 = NR; 1 = no, or deprecation of daily rounds in favor of high culture and ideology; 2 = yes, but not specifying language; 3 = yes, including language.

16-17 What must the ordinary PR family in N.Y. preserve (maintain) in order to remain PR?: 0 = NR; 1 = attitudes (feelings, sentiments); 2 = knowledge; 4 = daily ethnic behaviors of whatever kind; 8 = use of language; 16 = organizational participation. (GEOMETRIC)

18-19 How important is Spanish in being (or remaining) PR?: 0 = NR; 1 = neutral, unconcerned, no opinion; 2 = unimportant; 4 = important for acquisition and maintenance of positive ethnic identification (ideology, sentiment, feeling); 8 = important for acquisition and maintenance of positive national knowledge (literature, art, history); 16 = important for acquisiton and maintenance of distinctive way of life (daily rounds, customs, foods, celebrations; 32 = important, individualities. (GEOMETRIC)

20-21 Why do some PRs in New York feel bothered (negative) about being PR?: 0 = NR; 1 = no such feelings exist among PR in NY; 2 = family disorientation; 4 = instrumental shift; 8 = integrative shift; 16 = de-identification due to negative image of PR in American society; 32 = other pressures of American environment (including school). (GEOMETRIC)

22 Differences between PRs and other Hispanos: 0 = NR; 1 = relatively minor and not linguistic; 2 = relatively minor including linguistic; 3 = quite substantial but not linguistic; 4 = quite substantial including linguistic.

23 Amalgamation of PR and other Hispanos in N.Y.?: 0 = NR; 1 = possible, likely; 2 = impossible, unlikely; 3 = no opinion or no information.

24-25 How can the various Hispanic cultures differ and the language yet be the same?: 0 = NR; 1 = denial or minimization of cultural differences; 2 = differences are historical (accidental) rather than cultural; 4 = language varies slightly but sufficiently to permit cultural differences; 8 = language and culture need not be isomorphic (i.e., one can vary without the other varying).

26-27 Is there a conflict between PR culture and American culture?: 0 = NR; 1 = yes (values, styles of thinking feeling); 2 = yes (behaviors other than language); 4 = yes (different language required); 8 = no conflict (both can be combined). (GEOMETRIC)

28 Can PR and American culture be combined?: 0 = NR; 1 = no; 2 = yes (desirable); 3 = yes (undesirable).

29 Can a creative PR culture be maintained and developed here in N.Y.?: 0 = NR; 1 = no; 2 = yes, but only in Spanish; 3 = yes, in English and in Spanish; 4 = yes, even if only in English.

30 Plans to resettle in PR?: 0 = NR; 1 = no; 2 = yes, indefinite; 3 = yes, definite time and place; 4 = uncertain.

31 Does respondent feel just as much at home with Americans as with PR?: 0 = NR; 1 = yes, with all; 2 = yes, with some; 3 = no, not with any.

32 Is respondent upwardly mobile relative to father's highest occupation? (see column 15): 0 = NR; 1 = same level (1, 2, 3, in 15); 2 = respondent at higher level (4, 5, 6 in 15); 3 = respondent at lower level (7, 8, 9 in 15).

33 Is respondent upwardly mobile relative to father's highest attempted education? (compare columns 10 and 16): 0 = NR; 1 = same level; 2 = respondent at higher level; 3 = respondent at lower level.

(II-4-a)

[64 QUESTIONS]

1. Your birthdate: Month___________; Date_________; Year 19_______.

2. Your sex: Male_____; Female_____.

3. Where were you born: U.S._____; PR_____; Other_____. If born in PR how many years have you lived in U.S._____?

4. Where was your father born? U.S._____; PR_____; Other_____.

5. Where was your mother born? U.S._____; PR_____; Other_____.

6. What is your father's occupation (or mother, if father does not live with you)?____.

7. What is your father's education (or mother, if father does not live with you)?____.

8. Has your family's life changed for the better during the past 5 years or so? 8. Yes__No__.

9. Do you speak Spanish as well as you speak English? 9. Yes__No__.

10. Is education one of your major interests? 10. Yes__No__.

11. Do you usually speak English to your father and to other Puerto Rican male adults? 11. Yes__No__. Father absent__.

12. Do non-puerto Ricans visit you at your home? 12. Yes__No__.

13. Do you often eat typically Puerto Rican foods? 13. Yes__No__.

14. Do most American children that you know obey their parents as much as Puerto Rican children do? 14. Yes__No__.

15. Is religion one of your major interests? 15. Yes__No__.

16. Do you usually speak both Spanish and English to most Puerto Rican friends your age? 16. Yes__No__.

17. Do you prefer others to think of you simply as American? 17. Yes__No__.

18. Has your family's life changed for the worse during the past 5 years or so? 18. Yes__No__.

19. Do you belong to an organization primarily for Puerto Ricans? 19. Yes__No__.

20. Is politics one of your major interests? 20. Yes__No__.

21. Do you often speak primarily in Spanish to any Puerto Ricans who know both Spanish and English? 21. Yes__No__.

22. Did you or a member of your household visit PR during the past year or two? 22. Yes__No__.

23. Do you do "Latin" dancing? 23. Yes__No__.

24. Is America really a "land of opportunity" for you and your family? 24. Yes__No__.

25. Is organizational (club) activity one of your major interests? 25. Yes__No__.

26. Do you often use Spanish to crack jokes or for "Hip talk"? 26. Yes__No__.

27. Is being Puerto Rican any different from being another kind of American? 27. Yes__No__.

28. Do you think you might be happier living in Puerto Rico? 28. Yes__No__.

29. Are most of your good friends of Puerto Rican origin? 29. Yes__No__.

30. Is occupational success one of your major interests? 30. Yes__No__.

31. Do you usually speak English to your mother and to other Puerto Rican female adults? 31. Yes__No__.

32. Is being Puerto Rican different from being another kind of Hispano? 32. Yes__No__.

33. When you go to church, do you usually attend a Spanish service? 33. Yes__No__.

34. Did anyone from PR visit you or some member of your household during the past year or two? 34. Yes__No__.

35. Is sports one of your major interests? 35. Yes__No__.

36. Do you usually speak Spanish when you get emotional or upset with a Puerto Rican friend or relative? 36. Yes__No__.

37. Do you enjoy "American" dancing? 37. Yes__No__.

38. Do you think your family will be better off 5 years from now? 38. Yes__No__.

39. Is finding non-Puerto Rican friends one of your major interests? 39. Yes__No__.

40. Is literature-art-music-drama an area of prime interest to you? 40. Yes__No__.

41. Do you usually speak English to them when you want your parents or grandparents to do you a favor? 41. Yes__No__.

42. Do you think the husband should have the final word on most problems that come up in the family? 42. Yes__No__.

43. Do you read a Spanish publication from time to time? 43. Yes__No__.

44. Are many Americans that you have met prejudiced against Puerto Ricans? 44. Yes__No__.

45. Are social affairs (parties, etc.) of great interest to you? 45. Yes__No__.

46. Do you write poems, songs or stories in Spanish? 46. Yes__No__.

47. Have you become (or would you like to be) a compadre or comadre to someone? 47. Yes__No__.

48. Do you listen to Spanish radio programs? 48. Yes__No__.

49. Do you feel as much at home among Americans as among Puerto Ricans? 49. Yes__No__.

50. Are you interested in traveling to places you have never visited before? 50. Yes__No__.

51. Do you write poems, songs or stories in English? 51. Yes__No__.

52. Do you usually speak Spanish when you become very friendly or familiar with another Puerto Rican? 52. Yes__No__.

53. Do you (or would you) like to watch Spanish TV programs? 53. Yes__No__.

54. Do you go out on dates with both Puerto Ricans and non-Puerto Ricans? 54. Yes__No__.

55. Have you met any Americans who are familiar with Puerto Rican culture (its writers, artists, etc.)? 55. Yes__No__.

56. Are there some people to whom you try to speak a "better" kind (a more "cultured" kind) of Spanish? 56. Yes__No__.

57. Do you think it is important that Puerto Ricans living in New York preserve their customs and traditions? 57. Yes__No__.

58. Do you go to Spanish movies or shows? 58. Yes__No__.

59. When you have children, do you want them to be able to speak Spanish fluently? 59. Yes__No__.

60. Are there some Puerto Ricans who give too much emphasis to being Puerto Rican? 60. Yes__No__.

61. When you have children, do you want them to be able to speak English fluently? 61. Yes__No__.

62. Are there some people to whom you try to speak a "better" kind (a more "cultured" kind) of English? 62. Yes__No__.

63. Are there some Puerto Ricans who try to act too American? 63. Yes__No__.

64. Are most educated Americans really as cultured and refined as most educated Puerto Ricans? 64. Yes__No__.

Your comments on any of the above questions will be greatly appreciated:

____

____

____

____

____

____

____

____

____

____

(II-4-a)

WOULD YOU AGREE TO...?

(What would you be willing to do?)

1. Would you agree to participate in a small-group discussion, with other youngsters of Puerto Rican origin in New York, on the topic of improving your command of Spanish language and literature? ___Yes___No

2. Would you agree to have as your roommate in college a youngster of Puerto Rican origin who preferred to speak in Spanish? ___Yes___No

3. Would you agree to spend a weekend at the home of another youngster of Puerto Rican origin in New York who wanted to discuss with you how to improve your command of Spanish language and literature? ___Yes___No

4. Would you agree to invite another youngster of Puerto Rican origin to spend a weekend at your home in order to discuss with him (or her) how to improve your command of Spanish language and literature? ___Yes___No

5. Would you agree to join a club for youngsters of Puerto Rican origin in New York who are interested in improving their command of Spanish language and literature? ___Yes___No

6. Would you agree to attend a lecture or conference on the topic of how youngsters of Puerto Rican origin in New York can improve their command of Puerto Rican language and literature? ___Yes___No

7. Would you agree to join a protest-meeting against New York youngsters of Puerto Rican origin who cease speaking and reading the Spanish language? ___Yes___No

8. Would you agree to attend a meeting of a local chapter (in your borough) of a Young Puerto Rican's Association for Strengthening the Use of Spanish in New York? ___Yes___No

9. Would you, if asked, agree to contribute $1.00 to help finance the activities of a Young Puerto Rican's Association for Strengthening the Use of Spanish in New York? ___Yes___No

10. If you have answered yes to any of the above please give your:

Name____

Address______________________________________

Telephone No.________________________________

(II-4-a)

CODE SHEET: HIGH SCHOOL QUESTIONNAIRE

Column (s)	Items and Options
1 - 4	Study number (col. 1); subject number (cols. 2-3-4).
5	Name and address: 1 = given; 0 = not given.
6	Group number: 1 = Q scores only (no commitment scale sent, no invitation); 2 = Q scores, c score, unsigned and therefore no invitation; 3 = Q scores, c score, signed, did not reply to invitation; 4 = Q scores, c score, signed, replied "no" to invitation; 5 = Q scores, c score, signed, replied "yes" to invitation but did not come; 6 = Q score, c score, signed, replied "yes" to invitation and came. DOUBLE PUNCH: x = "TOP".
7	Age: 0 = NR; 1 = 14; 2 = 15; 3 = 16; 4 = 17; 5 = 18; 6 = 19; 7 = 20; 8 = 21 and over.
8	Sex: 0 = NR; 1 = male; 2 = female.
9	Birthplace (and years in continental USA if born in PR): 0 = NR; 1 = born in continental USA; 2 = born in PR, less than 2 years in cont. USA; 3 = born in PR, 2-5 years in cont. USA; 4 = born in PR, 6-10 years in cont. USA; 5 = born in PR, 11-15 years in cont. USA; 6 = born in PR, 16 or more years in USA; 7 = other.
10	Parents birthplace: 0 = NR for one or both; 1 = both born in continental USA; 2 = both born in PR; 3 = mother PR, father cont. USA; 4 = mother cont. USA, father PR; 5 = mother PR, father other; 6 = mother other, father PR; 7 = both other.
11	Father's occupation (or mother's, if father is absent): 0 = NR; 1 = operative, laborer, unemployed; 2 = blue collar, skilled craftsman; 3 = white collar, self employed craftsman, sub-professional; 4 = professional; 5 = housewife.
12	Father's education (or mother's, if father is absent): 0 = NR; 1 = none to began elem.; 2 = completed elementary (8 years); 3 = began secondary; 4 = completed secondary; 5 = post secondary (NOTE: vocational training = began secondary or completed secondary, depending on completion and on technical nature of training).
13	Item 8: 0 = no; 1 = yes; blank = NR (NOTE: All other items are coded this way except for items 11, 12 17, 18, 31, 32, 39, 41, 54, and 60 in which 0 = yes and 1 = no).

14 Item 9

15 Item 10

16 Item 11: 0 = yes; 1 = no (blank = nr or father absent).

17 Item 12: 0 = yes; 1 = no.

18 Item 13:

19 Item 14

20 Item 15

21 Item 16

22 Item 17: 0 = yes; 1 = no.

23 Item 18: 0 = yes; 1 = no.

24 Item 19

25 Item 20

26 Item 21

27 Item 22

28 Item 23

29 Item 24

30 Item 25

31 Item 26

32 Item 27

33 Item 28

34 Item 29

35 Item 30

36 Item 31: 0 = yes; 1 = no (blank = nr or mother absent).

37 Item 32: 0 = yes; 1 = no.

38 Item 33:

39 Item 34

40 Item 35

41	Item 36
42	Item 37
43	Item 38
44	Item 39: 0 = yes; 1 = no.
45	Item 40
46	Item 41: 0 = yes; 1 = no.
47	Item 42
48	Item 43
49	Item 44
50	Item 45
51	Item 46
52	Item 47
53	Item 48
54	Item 49
55	Item 50
56	Item 51
57	Item 52
58	Item 53
59	Item 54: 0 = yes; 1 = no.
60	Item 55
61	Item 56
62	Item 57
63	Item 58
64	Item 59
65	Item 60: 0 = yes; 1 = no.
66	Item 61

67	Item 62
68	Item 63
69	Item 64
70-71	Comments: 0 = none; 1 = explanatory or other neutral; 2 = positive toward study; 4 = negative toward study; 8 = positive toward PRs or Spanish; 16 = negative toward PRs or Spanish. (GEOMETRIC)

(Commitment Scale)

72	Item 1: 0 = no; 1 = yes; blank = nr.
73	Item 2
74	Item 3
75	Item 4
76	Item 5
77	Item 6
78	Item 7
79	Item 8
80	Item 9

(III-1-a)

[COLUMNS INDICATED]

[CENSUS]

Good (morning, afternoon, evening). I am (we are) (a) member(s) of the Yeshiva University "Puerto Rican Neighborhood Study." I (we) have a few questions to ask and would greatly appreciate a few minutes of your time. (Father Call and Father Jose are supporting our study and have asked all Puerto Ricans in this neighborhood to cooperate with us). (Can I come at some other time?) (Use English / or Spanish)

I 1) Your Name____________________ (Circle Sex) M F [COL. 19]

2) Age [COL. 20] 3) Birthplace (City) [COL. 21] 4) Occupation [COL. 22]

5) Education [COL. 24] 6) Yrs. in USA [COL. 25] 7) Yrs. in J.C. [COL. 26

8) Yrs. at this address [COL. 27]

Who are the others living in this apartment?

Name and relationship [COL. 19]	[COL. 20] 2	[COL. 21] 3	[COL. 22] 4	[COL. 24] 5	[25 6	COLS. 26 7	27] 8
II______ MF							
III______ MF							
IV______ MF							
V______ MF							
VI______ MF							
VII______ MF							
VIII______ MF							
IX______ MF							
X______ MF							

Notes: (1) Use NR for "no response"
Use NP for "not applicable" (for example, the work questions for individuals that do not work, such as housewives, school children)

(2) When individuals are currently unemployed, currently not going to church, currently not writing letters, etc., reword question to: when you were working, when you did go to church, when you used to write letters, etc.

[COL.]	A. Spanish: (2=yes; 1=a little; 0=no)		I	II	III	IV	V	VI	VII	VIII	IX	X
[28]	a. *Can you understand a conversation in Spanish?	a.										
[29]	b. *Can you speak (engage in a conversation) in Spanish?	b.										
[30]	c. *Can you read newspapers or books in Spanish?	c.										
[31]	d. Can you write letters in Spanish?	d.										
	Total											
	B. English: (2=yes; 1=a little; 0=no)		I	II	III	IV	V	VI	VII	VIII	IX	X
[32]	a. Can you understand a conversation in English?	a.										
[33]	b. *Can you speak (engage in a conversation) in English?	b.										
[34]	c. *Can you read newspapers or books in English?	c.										
[35]	d. *Can you write letters in English?	d.										
	Total											

[COL.]	C. (2=Spanish; 1=both; 0=English)		I	II	III	IV	V	VI	VII	VIII	IX	X
[36]	a. What was the first language in which you understood a conversation?	a.										
[37]	b. *What was the first language which you spoke (to engage in a conversation)?	b.										
[38]	c. What was the first language in which you read books or newspapers?	c.										
[39]	d. What was the first language in which you wrote letters?	d.										
	Total											

	D. (2=Spanish; 1=both; 0=English)		I	II	III	IV	V	VI	VII	VIII	IX	X
[40]	a. What language do(es) you most frequently use at home for conversation?	a.										
[41]	b. In what language do(es) you most frequently read books or newspapers at home?	b.										
[42]	c. What language do(es) you most frequently use at home for writing letters?	c.										
	Total											

[COL.]	E. (2=Spanish; 1=both; 0=English)		I	II	III	IV	V	VI	VII	VIII	IX	X
[43] (and 47)	a. What language do(es) you most frequently use at work for conversation with fellow workers?	a.										
[44] (and 46, 47)	b. What language do(es) you most frequently use at work for conversation with your supervisor (boss)?	b.										
[45]	c. What language do(es) you most frequently use at work for conversations with cutomers, clients?	c.										
	Total											
[48]	F. What was (is) the language of instruction in (your) school? (2=S; 1=both; 0=E)											
[49]	G. What language do(es) (you) like most (for conversation)?											
	H. (2=Spanish; 1=both; 0=English)											
[50]	a. In what language does (your) priest (minister) give the sermon when (you) attend services?	a.										
[51]	b. When you pray silently to yourself (at church or at home), what language do you use?	b.										
[52]	c. In what language is the service conducted when you attend church?	c.										
	Total											

Study 4

Code Sheet: CENSUS

Column (s)	Item and Options
1 - 4	Study number (1); Subject number (2,3,4); no card number (one card). Note: For adults (age 13 and up) use preassigned code numbers; for minors use running numbers starting with 250, if no preassigned no's are available.
5 - 6	Household no.
7	Characterization of respondent: 1 = male head of household (husband, father, or other in that role and generation regardless of whether there is a female head of household); 2 = female head of household; 3 = male offspring (natural or adopted) aged 13 and over; 4 = female offspring aged 13 and over; 5 = male offspring: minor; 6 = female offspring: minor; 7 = other adult male relative of a head of household (e.g., parent, uncle, brother, cousin); 8 = other adult female relative of a head of household; 9 = unrelated adult male; 0 = unrelated adult female; x = respondent for entire household. (NOTE: Double punch).
8	Characterization of household by head of household: 1 = male head only; 2 = female head only; 3 = both male and female head; 4 = neither male nor female head (e.g., where two adults of same sex and generation constitute the household).
9	Characterization of household by total size: 1 = 1; 2 = 2; 3 = 3; etc. to 0 = 10 or more.
10	Characterization of household by number of siblings in residence (both adult and minor): 1 = 1; etc. to 0 = 10; x = 0.
11	Characterization of household by recency of arrival from PR of most recently arrived head of household from PR: 1 = less than one year; 2 = one to two years; 3 = 3 to five years; 4 = 6 to 10 years; 5 = 11 to 20 years; 6 = over 20 years; 7 = US born (both, or the only one available).
12	Characterization of household by recency of arrival from PR of most recently arrived member: Same code as for column 11 (0 = all US born).

13 Characterization of household by generational range: 1 = one generation only (no children or grandchildren own or adopted); 2 = two generations (e.g., parents and children); 3 = three or more generations (e.g., grandparents, parents and children).

14 Characterization of household by assigned education and occupational category (see enumeration) of MHH, (or, if no HH, of other senior male member): 1 = A (Hi Ed & Hi Job); 2 = B (Lo Ed & Hi Job); 3 = C (Hi Ed & Lo Job); 4 = D (Lo Ed & Lo Job); 0 = No MHH & no senior male.

15 Characterization of household by assigned educational and occupational category (see enumeration) of FHH (or, if no HH of other senior female member): 0 = no FHH and no adult female; etc, as in column 14.

16 Characterization of household by contrasted status of MHH and FHH (or of senior M & F members) re educational and occupational category: 0 = no contrasted status possible due to absence of M & F Heads of senior members; 1 = FHH equal to MHH; 2 = FHH higher educationally but not occupationally; 3 = FHH higher occupationally but not educationally; 4 = FHH higher both educationally and occupationally; 5 = FHH lower both educationally and occupationally; 6 = FHH lower educationally but not occupationally; 7 = FHH lower occupationally but not educationally.

17 Characterization of household by place of birth of MHH (or of FHH if there is no MHH, or if no HH, of most senior member): 1 = USA; 2 = San Juan or some section thereof (Santurce, Rio Piedras, Hato Rey, Martin Pena, Puerto Nuevo); 3 = Cities of 10,000 or larger population: Aguadilla, Arecibo, Bayamon, Caguas, Coamo, Fajardo, Guayama, Mayaguez, Ponce; 4 = smaller towns; 5 = rural areas.

18 Characterization of household by occupation of MHH or FHH (or if no HH, other senior member) whichever is higher: 0 = NR; 1 = operative; service worker, laborer or welfare (usually unemployed); 2 = craftsman, foreman or blue collar worker; 3 = self employed, white collar worker, clerk, sec'y, salesman, or sub-professional; 4 = professional, manager, official or college students; 5 = housewife (also no MHH; welfare or no visible means of support). NOTE: Widows who do not work should be classified by deceased husband's occupation. 6 = unemployed minor, over 16 yrs. of age and not in high school.

19 Sex of respondent: 1 = male; 2 = female.

20 Age of respondent: 0 = NR; 1 = 6 and below (pre-school ages); 2 = 7 to 12 (elementary school ages); 3 = 13-18 (secondary school ages); 4 = 19-24; 5 = 25-34; 6 = 35-44; 7 = 45-54; 8 = 55-64; 9 = 65 and over.

21 Birthplace of respondent: Same code as for column 17.

22 Occupation of respondent: Same code as for column 18.

23 Number of employed members of the household: 0 = none; 1 = 1; 2 = 2; etc.

24 Highest grade of school attended: 0 = NR; 1 = none; 2 = elementary (1 - 6); 3 = secondary (7 - 12); 4 = college; 5 = graduate school. NOTE: Classify trade and vocational courses as #3.

25 Years in USA: 0 = NR; Same code as for column 11.

26 Years in J.C.: Same code as for column 11.

27 Years at this address: Same code as for column 11.

28 Can respondent understand a conversation in Spanish?: 0 = no; 1 = a little; 2 = yes. NOTE: for NR or NP leave this column blank in order not to complicate computation of means, standard-deviations, etc.).

29 Can speak Spanish?: Same code as for column 28.

30 Can read Spanish?: Same code as for column 28.

31 Can write Spanish?: Same code as for column 28.

32 Can understand English?: Same code as for column 28.

33 Can speak English?: Same code as for column 28.

34 Can read English?: Same code as for column 28.

35 Can write English?: Same code as for column 28.

36 First language understood?: 0 = English; 1 = both; 2 = Spanish. Note: for NR or NP make no entry.

37 First language spoken?: Same code as for column 36.

38 First language read?: Same code as for column 36. For "does not read either language," leave blank.

39 First language written?: Same code as for column 36. For "does not write either language" leave blank.

40 Most frequent language spoken at home?: Same code as for column 36.

41 Most frequent language read at home?: Same code as for column 36.

42 Most frequent language written at home?: Same code as for column 36.

43 Most frequent language spoken at work with fellow workers?: Same code as for column 36.

44 Most frequent language spoken at work with boss?: Same code as for column 36.

45 Most frequent language spoken at work with customers?: Same code as for column 36.

46 X = Boss knows Spanish but S speaks English to him.

47 Y = Uses interpreter at work.

48 Language of instruction in school?: Same code as for column 36.

49 Language liked for conversation: 2 = S; 1 = both, 0 = E.

50 Language of church sermons?: Same code as for column 36. 4 = Latin.

51 Language of silent prayer?: Same code as for column 36.

52 Language of church services?: Use same code as for column 36. 4 = Latin.

53 Latin in sermons and services?: 1 = neither; 2 = sermons only; 3 = services only; 4 = both.

54, 55 House number

56 Floor number

57, 58 Right neighboring house (facing street)

59, 60 Left neighboring house (facing street)

61 Status of subject "re" reliability sample: 1 = not in reliability; 2 = first return; 3 = second return.

(III-3-a)

Date of birth: Year_____, Month_____, Day_____

[A STUDY OF CONVERSATIONS]

Directions

We are interested in finding out about conversations BETWEEN PUERTO RICANS WHO ARE BILINGUAL.

On the following pages a number of conversations will be described to you. You will be asked to imagine that you are talking to various people in particular places about particular topics. In each of these conversations you are to answer the following question:

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
1.	Place: Topic: Speakers:	your home how a son or daughter is expected to behave you and your parent	1 2 3 4 5
2.	Speakers: Topic: Place:	you and your employer how to do your job in the most efficient way your place of work	1 2 3 4 5
3.	Place: Speakers: Topic:	your school you and your teacher how a son or daughter is expected to behave	1 2 3 4 5

(III-3-a)

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
4.	Topic:	how a Christian should act	
	Speakers:	you and your parent	
	Place:	your home	1 2 3 4 5
5.	Place:	the beach	
	Topic:	how to solve a math problem	
	Speakers:	you and your teacher	1 2 3 4 5
6	Place:	your place of work	
	Speakers:	you and your parent	
	Topic:	how a son or daughter is expected to behave	1 2 3 4 5
7.	Speakers:	you and your friend	
	Place:	the beach	
	Topic:	how to solve a math problem	1 2 3 4 5
8.	Topic:	how to play a game	
	Speakers:	you and your teacher	
	Place:	your school	1 2 3 4 5
9.	Speakers:	you and your friend	
	Topic:	how to do your job in the most efficient way	
	Place:	your place of work	1 2 3 4 5
10.	Speakers:	you and your employer	
	Place:	the beach	
	Topic:	how to play a game	1 2 3 4 5

(III-3-a)

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
11.	Place:	your place of work	
	Topic:	how a son or daughter is expected to behave	
	Speakers:	you and your employer	1 2 3 4 5
12.	Topic:	how to solve a math problem	
	Speakers:	you and your parent	
	Place:	your home	1 2 3 4 5
13.	Speakers:	you and your friend	
	Topic:	how a Christian should act	
	Place:	in church	1 2 3 4 5
14.	Topic:	how to play a game	
	Place:	the beach	
	Speakers:	you and your teacher	1 2 3 4 5
15.	Place:	your home	
	Speakers:	you and your priest	
	Topic:	how a Christian should act	1 2 3 4 5
16.	Speakers:	you and your employer	
	Place:	your place of work	
	Topic:	how to play a game	1 2 3 4 5
17.	Topic:	how to do your job (at work) in the most efficient way	
	Place:	your home	
	Speakers:	you and your parent	1 2 3 4 5

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
18.	Place:	in church	
	Speakers:	you and your priest	
	Topic:	how to play a game	1 2 3 4 5
19.	Topic:	how a Christian should act	
	Place:	the beach	
	Speakers:	you and your friend	1 2 3 4 5
20.	Place:	your school	
	Speakers:	you and your parent	
	Topic:	how to solve a math problem	1 2 3 4 5
21.	Topic:	how to play a game	
	Place:	in church	
	Speakers:	you and your friend	1 2 3 4 5
22.	Speakers:	you and your priest	
	Topic:	how a son or daughter is expected to behave	
	Place:	your home	1 2 3 4 5
23.	Place:	the beach	
	Topic:	how to do your job (at work) in the most efficient way	
	Speakers:	you and your friend	1 2 3 4 5
24.	Speakers:	you and your teacher	
	Place:	your home	
	Topic:	how a son or daughter is expected to behave	1 2 3 4 5

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION — CIRCLE YOUR ANSWERS

25. Place: in church
Topic: how a Christian should act
Speakers: you and your parent — 1 2 3 4 5

26. Speakers: you and your friend
Topic: how to play a game
Place: your school — 1 2 3 4 5

27. Place: your home
Topic: how to do your job in the most efficient way
Speakers: you and your employer — 1 2 3 4 5

28. Speakers: you and your friend
Topic: how to solve a math problem
Place: your school — 1 2 3 4 5

29. Place: your place of work
Topic: how to do your job in the most efficient way
Speakers: you and your parent — 1 2 3 4 5

30. Topic: how to solve a math problem
Speakers: you and your teacher
Place: your school — 1 2 3 4 5

31. Topic: how a son or daughter is expected to behave
Place: in school
Speakers: you and your parent — 1 2 3 4 5

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
32.	Speakers:	you and your employer	
	Place:	the beach	
	Topic:	how to do your job in the most efficient way	1 2 3 4 5
33.	Place:	your place of work	
	Topic:	how to play a game	
	Speakers:	you and your friend	1 2 3 4 5
34.	Speakers:	you and your priest	
	Place:	in church	
	Topic:	how a son or daughter is expected to behave	1 2 3 4 5
35.	Place:	the beach	
	Speakers:	you and your priest	
	Topic:	how to play a game	1 2 3 4 5
36.	Topic:	how a son or daughter is expected to behave	
	Place:	your home	
	Speakers:	you and your employer	1 2 3 4 5
37.	Speakers:	you and your priest	
	Place:	in church	
	Topic:	how a Christian should act	1 2 3 4 5
38.	Place:	your home	
	Speakers:	you and your teacher	
	Topic:	how to solve a math problem	1 2 3 4 5

HOW MUCH OF YOUR TALK WOULD MOST LIKELY BE IN SPANISH AND HOW MUCH WOULD MOST LIKELY BE IN ENGLISH?

You are to answer this question by choosing from among the following alternatives:

1. I would use only Spanish in this conversation.
2. I would use mostly Spanish in this conversation.
3. I would use half Spanish and half English in this conversation.
4. I would use mostly English in this conversation.
5. I would use only English in this conversation.

When you give your answers we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

Please be sure to treat each conversation by itself, without regard to the answers that you give for the other conversations.

PLEASE BE SURE TO ANSWER ALL OF THE CONVERSATIONS

CONVERSATION			CIRCLE YOUR ANSWERS
39.	Place: Speakers: Topic:	the beach you and your priest how a Christian should act	1 2 3 4 5
40.	Topic: Speakers: Place:	how a son or daughter is expected to behave you and your parent in church	1 2 3 4 5
41.	Speakers: Topic: Place:	you and your friend how to play a game on the beach	1 2 3 4 5

(II-3-a)

Background Questionnaire

1. Your birthdate: Month_____, Date_____, Year_____.

2. Your sex: Male___, Female___.

3. Where were you born? U.S.___, P.R.___, Other__________.
(fill in)

4. If you were not born in the U.S., at what age did you arrive here?_____

5. Where was your father born? U.S.___, P.R.___, Other________.
(fill in)

6. Where was your mother born? U.S.___, P.R.___, Other________.
(fill in)

7. What is your father's occupation?______________________________

8. What is your mother's occupation?______________________________

9. What is the last year of school that your father completed?__________

10. Do you ever attend church services? yes___, no___.

If yes, (a) about how often do you attend?

Check:
1. once a week or more
2. once or twice a month
3. once every three or four months
4. once a year or less

(b) in what church are the services conducted?

Check:
1. Catholic
2. Pentacostal
3. Other Protestant

(c) in what language are these services conducted?

Check: English___, Spanish___.

11. Are you working at the present time? yes___, no___.

(a) If yes, what kind of work do you do?_________________________

(b) If yes, are most of the people at your place of work Puerto Ricans?
yes___, no___.

12. What is your grade point average in high school?_____

13. Are you planning to go to college? yes___, no___.

14. When do you expect to graduate from high school? Month_____, Year_____.

(III-3-a)

[A STUDY OF CONVERSATIONS]

Directions

We are interested in finding out about conversations BETWEEN PUERTO RICANS WHO ARE BILINGUAL.

On the following pages a number of situations will be described to you. You will be asked to imagine that you are talking to various people and to decide on two things about each conversation.

(1) The people to whom you would most likely be talking.

(2) How much of your talk would most likely be in Spanish and how much would most likely be in English.

When you answer these questions, we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

You are to answer the first question by choosing the people from among the following alternatives:

(1) A - your parent
B - your teacher
C - your priest or minister
D - your friend
E - your employer.

You are to answer the second question by choosing from among the following alternatives:

(2) 1 - I would use Spanish only in this conversation.
2 - I would use mostly Spanish in this conversation.
3 - I would use half Spanish and half English in this conversation.
4 - I would use mostly English in this conversation.
5 - I would use English only in this conversation.

When you answer the questions please be sure to treat each situation by itself without regard to the answers that you give to the other situations.

TEAR OFF THIS PAGE AND REFER TO THE ABOVE ALTERNATIVES WHEN YOU ANSWER THE QUESTIONS.

(III-3-a)

Date of birth:____Month, ____Date, ____Year

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

1. You are talking to someone in your school about how to play a game.
   1. To whom would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

2. You are talking to someone in your church about how a son or daughter is expected to behave.
   1. To whom would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

3. You are talking to someone in your place of work about how to do your job in the most efficient way.
   1. To whom would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

4. You are talking to someone at the beach about how a Christian should act.
   1. To whom would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

5. You are talking to someone in your place of work about how a son or daughter is expected to behave.
   1. To whom would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

(III-3-a)

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

6. You are talking to someone in your school about how to solve a math problem.
   1. To whom would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

7. You are talking to someone in your home about how a Christian should act.
   1. To whom would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

8. You are talking to someone in your place of work about how to play a game.
   1. To whom would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

9. You are talking to someone in your home about how to solve a math problem.
   1. To whom would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

10. You are talking to someone at the beach about how to play a game.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

11. You are talking to someone in your school about how a son or daughter is expected to behave.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

(III-3-a)

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

12. You are talking to someone in your church about how a Christian should act.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

13. You are talking to someone at the beach about how to solve a math problem.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

14. You are talking to someone in your home about how to do your job in the most efficient way.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

15. You are talking to someone in your church about how to play a game.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

16. You are talking to someone in your home about how a son or daughter is expected to behave.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

17. You are talking to someone at the beach about how to do your job in the most efficient way.
    1. To whom would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

17

[A STUDY OF CONVERSATIONS]

Directions

We are interested in finding out about conversations BETWEEN PUERTO RICANS WHO ARE BILINGUAL.

On the following pages a number of situations will be described to you. You will be asked to imagine that you are talking to various people and to decide on two things about each conversation.

(1) The topic you would most likely be discussing.

(2) How much of your talk would most likely be in Spanish and how much would most likely be in English.

When you answer these questions, we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

You are to answer the first question by choosing the topics from among the following alternatives:

(1) A - how to play a game
B - how to do your job in the most efficient way
C - how a Christian should act
D - how to solve a math problem
E - how a son or daughter is expected to behave

You are to answer the second question by choosing from among the following alternatives:

(2) 1 - I would use Spanish only in this conversation.
2 - I would use mostly Spanish in this conversation.
3 - I would use half Spanish and half English in this conversation.
4 - I would use mostly English in this conversation.
5 - I would use English only in this conversation.

When you answer the questions please be sure to treat each situation by itself without regard to the answers that you give to the other situations.

TEAR OFF THIS PAGE AND REFER TO THE ABOVE ALTERNATIVES WHEN YOU ANSWER THE QUESTIONS.

(III-3-a)

Date of birth:_____, Month, _____Date, _____Year

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

1. You are talking to your teacher on the beach.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

2. You are talking to your priest or minister in your home.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

3. You are talking to your employer at your place of work.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

4. You are talking to your friend in church.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

5. You are talking to your employer in your home.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

6. You are talking to your teacher in school.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

7. You are talking to your parent in church.
   1. About what are you most likely to be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

8. You are talking to your employer on the beach.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

9. You are talking to your parent in school.
   1. About what would you most probably be talking? (1)__________
   2. How much Spanish and English would you most probably use? (2)__________

---

10. You are talking to your friend at the beach.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

11. You are talking to your teacher in your home.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

12. You are talking to your priest or minister in church.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

(III-3-a)

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

13. You are talking to your friend in school.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

14. You are talking to your parent at your place of work.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

15. You are talking to your priest or minister at the beach.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

16. You are talking to your parent in your home.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

17. You are talking to your friend in your place of work.
    1. About what would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

[A STUDY OF CONVERSATIONS]

Directions

We are interested in finding out about conversations BETWEEN PUERTO RICANS WHO ARE BILINGUAL.

On the following pages a number of situations will be described to you. You will be asked to imagine that you are talking to various people and to decide on two things about each conversation.

(1) The place in which you would most likely be talking.

(2) How much of your talk would most likely be in Spanish and how much would most likely be in English.

When you answer these questions, we would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

You are to answer the first question by choosing the places from among the following alternatives:

(1) A - your school
B - the beach
C - your church
D - your home
E - your place of work

You are to answer the second question by choosing from among the following alternatives:

(2) 1 - I would use Spanish only in this conversation.
2 - I would use mostly Spanish in this conversation.
3 - I would use half Spanish and half English in this conversation.
4 - I would use mostly English in this conversation.
5 - I would use English only in this conversation.

When you answer the questions please be sure to treat each situation by itself without regard to the answers that you give to the other situations.

TEAR OFF THIS PAGE AND REFER TO THE ABOVE ALTERNATIVES WHEN YOU ANSWER THE QUESTIONS.

(III-3-a)

Date of birth:____Month, ____Date, ____Year

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

1. You are talking to your teacher about how to play a game.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

2. You are talking to your priest or minister about how a son or daughter is expected to behave.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

3. You are talking to your employer about how to do your job in the most efficient way.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

4. You are talking to your friend about how a Christian should act.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

5. You are talking to your employer about how a son or daughter is expected to behave.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

6. You are talking to your teacher about how to solve a math problem.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

7. You are talking to your parent about how a Christian should act.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

8. You are talking to your employer about how to play a game.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use?. (2)________

---

9. You are talking to your parent about how to solve a math problem.
   1. Where would you most probably be talking? (1)________
   2. How much Spanish and English would you most probably use? (2)________

---

10. You are talking to your friend about how to play a game.
    1. Where would you most probably be talking? (1)________
    2. How much Spanish and English would you most probably use? (2)________

---

11. You are talking to your teacher about how a son or daughter is expected to behave.
    1. Where would you most probably be talking? (1)________
    2. How much Spanish and English would you most probably use? (2)________

(III-3-a)

A reminder: We would like you to imagine that YOU AND ALL OF THE PEOPLE MENTIONED IN THESE CONVERSATIONS ARE PUERTO RICANS WHO CAN SPEAK SPANISH AND ENGLISH EQUALLY WELL.

The Situations

Place Answers In This Column

12. You are talking to your priest or minister about how a Christian should act.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

13. You are talking to your friend about how to solve a math problem.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

14. You are talking to your parent about how to do your job in the most efficient way.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

15. You are talking to your priest or minister about how to play a game.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

16. You are talking to your parent about how a son or daughter is expected to behave.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

---

17. You are talking to your friend about how to do your job in the most efficient way.
    1. Where would you most probably be talking? (1)__________
    2. How much Spanish and English would you most probably use? (2)__________

Study X3: Conversational Components I

Coding

Card	Column	Item and Option
1	1	Study number
1	2-4	Subject number
	5	Card number
	6	Form 1 = S selects person 2 = S selects place 3 = S selects topic
	7-8	Domain: Family (congruent)
	9-10	Domain: Friendship (congruent)
	11-12	Value Cluster: Intimacy (congruent)
	13-14	Domain: Religion (congruent)
	15-16	Domain: Education (congruent)
	17-18	Domain: Employment (congruent)
	19-20	Value Cluster: Status (congruent)
	21-22	Domain: Family (incongruent)
	23-24	Domain: Friendship (incongruent)
	25-26	Value Cluster: Intimacy (incongruent)
	27-28	Domain: Religion (incongruent)
	29-30	Domain: Education (incongruent)
	31-32	Domain: Employment (incongruent)
	33-34	Value Cluster: Status (incongruent)

Study X2: Conversational Components II

Coding

Card	Col.	Item and Option
1	1	Study Number
	2-4	Subject Number
	5	Card Number
	6-46	Items 1-41 See Questionnaire

[3. Word Frequency Estimation]

A. SPANISH
(Give instructions in Spanish)

I'm going to read you some Spanish words. You probably use some of them all the time. There are others that you may use only now and then. After I read you a word, I want you to tell me how often you hear or say it. For example,

If you hear or say it more than once a day, tell me "more than once a day."
If you hear or say it about once a day, tell me "once a day."
If it's about every other day, tell me "every other day."
If you hear or say it about once a week, tell me "once a week."
If it's about every other week, tell me "every other week."
If you hear or say it about once a month, tell me "once a month."
If it's about every other month, tell me "every other month."
And if you never hear or say it, tell me "never."

(Review the "times" with R: 1) point out the two extremes ("more than once a day" and "never"). 2) point out that the other times go with day, week, and month (once a day, every other day; once a week, every other week; once a month, every other month). Ask R to repeat the times.)

For example, how often do you hear or say the word gato? Is it more than once a day? once a day? (Continue until R selects a response.) Fine, now how often do you hear or say the word ciudad? (As above). And how often do you hear or say the word organisacion. (As above).

(Begin the following list of Spanish words. Read each word in a conversational tone. Go at a relatively brisk pace, but give R a second after he finishes rating one word before saying the next one. You may need to remind him of the frequencies from which he can choose. This is OK. Do so as often as necessary.)

(IV-1-a)

Word Frequency Estimation List (Spanish)

(To the left of each word, write the number corresponding to the R's rating, as follows:

7 = more than once a day
6 = once a day
5 = once every other day
4 = once a week
3 = every other week
2 = once a month
1 = every other month
0 = never)

leche
historia
comunión
factoría
barbería
desayuno
examen
bautismo
jefe
bodega
abuela
pluma
trinidad
ocupacíon
dominos
comida
lección
religión
empleo
parque
casa
estudiante
santo
obra
curba
cocina
ciencia
cura
trabajo
carnicero
compadre
pizzara
biblia
taller
carro
plato
lápiz
altar
negocio
farmacia
pimienta
tiza
misal
oficina
vecino
pan
tinta
iglesia
mecánico
pompa
familia
escuela
himno
compañía
calle
amigo
papel
crucifijo
trabajador
tienda
padrino
matemáticas
rosario
empleado
vecindad
cuchara
libro
estatua
secretaria
barrio
estufa
regla
vela
profesión
barbero

(IV-1-a)

On the following page is a list of Spanish words. You will be asked how often you use (hear or say) each word. Next to each word, write one of the following numbers that tells, in general, how often you hear or say each word.

HOW OFTEN DO YOU HEAR OR SAY EACH WORD?

7 = more than once a day

6 = once a day

5 = once every two days

4 = once a week

3 = once every two weeks

2 = once a month

1 = less than once a month

0 = never

(IV-1-a)

HOW OFTEN DO YOU HEAR OR SAY EACH WORD?

7 = more than once a day
6 = once a day
5 = once every two days
4 = once a week
3 = once every two weeks
2 = once a month
1 = less than once a month
0 = never

leche
historia
comunión
factoría
barbería
desayuno
examen
bautismo
jefe
bodega
abuela
pluma
trinidad
ocupacíon
dominós
comida
lección
religión
empleo

parque
casa
estudiante
santo
obra
curba
cocina
ciencia
cura
trabajo
carnicero
compadre
pizzara
biblia
taller
carro
plato
lápiz
altar

negocio
farmacia
pimienta
tiza
misal
oficina
vecino
pan
tinta
iglesia
mecánico
pompa
familia
escuela
himno
compañía
calle
amigo
papel

crucifijo
trabajador
tienda
padrino
matemáticas
rosario
empleado
vecindario
cuchara
libro
estatua
secretaria
barrio
estufa
regla
vela
profesíon
barbero

B. ENGLISH

Good. That's fine. Now I'm going to read you some English words. And I want you to tell me how often you hear or say them. Tell me if it's

more than once a day
once a day
every other day
once a week
every other week
once a month
every other month
never

(Read the following list of English words)

(IV-1-a)

Word Frequency Estimation List (English)

(To the left of each word, write the number corresponding to the R's rating, as follows:

7 = more than once a day
6 = once a day
5 = once every other day
4 = once a week
3 = every other week
2 = once a month
1 = every other month
0 = never)

niece
class
prayer
earnings
sidewalk
pepper
grade
sermon
union
butcher
dish
sentence
organ
typewriter
corner
table
eraser
statue
salary
mailman
bread
desk
candle
profession
fire escape
kitchen
ink
priest
factory
bakery
home
blackboard
church
boss
car
breakfast
pencil
rosary
secretary
drugstore
grandmother
chalk
communion
mechanic
curb
stove
school
saint
worker
street
family
science
crucifix
job
barber
supper
history
altar
business
neighbor
spoon
test
minister
office
market
friend
book
confession
work
neighborhood
milk
student
bible
corporation
dominoes

(IV-1-a)

On the following page is a list of English words. You will be asked how often you use (hear or say) each word. Next to each word, write one of the following numbers that tells, in general, how often you hear or say each word.

HOW OFTEN DO YOU HEAR OR SAY EACH WORD?

7 = more than once a day
6 = once a day
5 = once every two days
4 = once a week

3 = once every two weeks
2 = once a month
1 = less than once a month
0 = never

(IV-1-a)

HOW OFTEN DO YOU HEAR OR SAY EACH WORD?

7 = more than once a day

6 = once a day

5 = once every two days

4 = once a week

3 = once every two weeks

2 = once a month

1 = less than once a month

0 = never

niece
class
prayer
earnings
sidewalk
pepper
grade
sermon
union
butcher
dish
sentence
organ
typewriter
corner
table
eraser
statue
salary
mailman
bread
desk
candle
profession
fire escape
kitchen
ink
priest
factory
bakery
home
blackboard
church
boss
car
breakfast
pencil
rosary
secretary
drugstore
grandmother
chalk
communion
mechanic
curb
stove
school
saint
worker
street
family
science
crucifix
job
barber
supper
history
altar
business
neighbor
spoon
test
minister
office
market
friend
book
confession
work
neighborhood
milk
student
bible
corporation
dominoes

Study 6: Word Frequency Estimation, Jersey City Responses

Coding

Card	Col.	Item and Options
1-2	1	Study Number
1-2	2-4	Subject Number
1-2	5	Card Number
1	6-80	English Word Frequency Ratings (see Appendix 1)
2	6-80	Spanish Word Frequency Ratings (see Appendix 2)

Appendix I

(card I)

Word Frequency Estimation List (English)

CODE

7 = more than once a day
6 = once a day
5 = once every other day
4 = once a week
3 = every other week
2 = once a month
1 = every other month
0 = never

Col		Col		Col		Col	
6	niece	25	mailman	44	secretary	63	altar
7	class	26	bread	45	drugstore	64	business
8	prayer	27	desk	46	grandmother	65	neighbor
9	earnings	28	candle	47	chalk	66	spoon
10	sidewalk	29	profession	48	communion	67	test
11	pepper	30	fire escape	49	mechanic	68	minister
12	grade	31	kitchen	50	curb	69	office
13	sermon	32	ink	51	stove	70	market
14	union	33	priest	52	school	71	friend
15	butcher	34	factory	53	saint	72	book
16	dish	35	bakery	54	worker	73	confession
17	sentence	36	home	55	street	74	work
18	organ	37	blackboard	56	family	75	neighborhood
19	typewriter	38	church	57	science	76	milk
20	corner	39	boss	58	crucifix	77	student
21	table	40	car	59	job	78	bible
22	eraser	41	breakfast	60	barber	79	corporation
23	statue	42	pencil	61	supper	80	dominoes
24	salary	43	rosary	62	history		

(IV-1-a)

Appendix II

(card II)

Word Frequency Estimation List (Spanish)

CODE

7 = more than once a day
6 = once a day
5 = once every other day
4 = once a week

3 = every other week
2 = once a month
1 = every other month
0 = never

Col		Col		Col		Col	
6	leche	25	parque	44	negocio	63	crucifijo
7	historia	26	casa	45	farmacia	64	trabajador
8	comunión	27	estudiante	46	pimienta	65	tienda
9	factoría	28	santo	47	tiza	66	padrino
10	barbería	29	obra	48	misal	67	matemáticas
11	desayuno	30	curba	49	oficina	68	rosario
12	examen	31	cocina	50	vecino	69	empleado
13	bautismo	32	ciencia	51	pan	70	vecindad
14	jefe	33	cura	52	tinta	71	cuchara
15	bodega	34	trabajo	53	iglesia	72	libro
16	abuela	35	carnicero	54	mecánico	73	estatua
17	pluma	36	compadre	55	pompa	74	secretaria
18	trinidad	37	pizzara	56	familia	75	barrio
19	ocupacíon	38	biblia	57	escuela	76	estufa
20	dominos	39	taller	58	himno	77	regla
21	comida	40	carro	59	compañía	78	vela
22	lección	41	plato	60	calle	79	profesíon
23	religión	42	lápiz	61	amigo	80	barbero
24	empleo	43	altar	62	papel		

[8. Spanish Usage Rating]

Now I'm going to ask you to tell me how much of your talk is in Spanish when you speak to people who know both English and Spanish.

I'll ask you about different people who might know both English and Spanish. They might not know them equally well, but they might be able to speak and understand at least a little of each.

If they only know one language, tell me. Or if you don't speak to the person I mention, tell me. But if you speak to the person, and if he knows both English and Spanish, tell me how much of your talk with him is in Spanish.

Tell me if it's all in Spanish.

almost all in Spanish (only a few English words)

about 70% in Spanish

about half in Spanish

about 30% in Spanish

only a few words in Spanish

none in Spanish

(Review these categories with R. Ask him to repeat them.)

OK?

(NOTE: -- When R says all in Spanish or none in Spanish, ask him if the person he's talking about knows both languages.)

(Score R's ratings according to the following:

NE = Person does not know English	3 = About 30% in Spanish
10 = All in Spanish	1 = Only a few Spanish words
9 = Almost all in Spanish	0 = None in Spanish
7 = About 70% in Spanish	NS = Person does not know Spanish
5 = About 50% in Spanish	X = Does not talk to person)

(For Respondents Who Are In School)

WHEN YOU ARE AT SCHOOL

In the classroom before or after class

teachers
close friends (boys)
other boys
close friends (girls)
other girls

In the classroom during class (whispering)

close friends (boys)
other boys
close friends (girls)
other girls

If R says all (10) or none (0), ask if person knows both English and Spanish.

In the corridors

teachers
close friends (boys)
other boys
close friends (girls)
other girls

(Score R's rating according to the following:

NE = Person does not know English
10 = All in Spanish
9 = Almost all in Spanish
7 = About 70% in Spanish
5 = About 50% in Spanish
3 = About 30% in Spanish
1 = Only a few Spanish words
0 = None in Spanish
NS = Person does not know Spanish
X = Does not talk to person)

WHEN YOU ARE AT WORK*

What kind of work do you do?
How long have you worked for that organization?
Do you belong to a union?

Your boss (the person who tells you what to do)

Fellow workers (the people you work with)

older (male)

older (female)

same age (male)

same age (female)

younger (male)

younger (female)

If R says all or none ask if person knows both English and Spanish.

---

*For those who are working now or who have worked in U.S.

(Score R's rating according to the following:

NE = Person does not know English
10 = All in Spanish
9 = Almost all in Spanish
7 = About 70% in Spanish
5 = About half in Spanish
3 = About 30% in Spanish
1 = Only a few Spanish words.
0 = None in Spanish
NS = Person does not know Spanish
X = Does not speak to person)

1. Do you belong to a church?
2. Which one?

WHEN YOU ARE AT CHURCH (Before or after service)

Church members

older (male)
older (female)
your age (male)
your age (female)
younger (male)
younger (female)
children

Clergy

priests (confession)
priests (other times at church)
ministers

If R says all or none, ask if person knows both Spanish and English.

(IV-1-b)

(Score R's ratings according to the following:

NE = Person does not know English
10 = All in Spanish
9 = Almost all in Spanish
7 = About 70% in Spanish
5 = About half in Spanish
3 = About 30% in Spanish
1 = Only a few Spanish words
0 = None in Spanish
NS = Person does not know Spanish
X = Does not talk to person)

WHEN YOU ARE IN YOUR NEIGHBORHOOD (On the sidewalks or street, on the stoops, in the stores, etc.)

People who live in your building	Others who live in the neighborhood
older (male)	older (male)
older (female)	older (female)
your age (male)	your age (male)
your age (female)	your age (female)
younger (male)	younger (male)
younger (female)	younger (female)
children	children

If R says all or none,
ask if person knows
both Spanish and English.

(Score R's rating according to the following:

NE = Person does not know English
10 = All in Spanish
9 = Almost all in Spanish
7 = About 70% in Spanish
5 = About half in Spanish
3 = About 30% in Spanish
1 = Only a few Spanish words
0 = None in Spanish
NS = Person does not know Spanish
X = Does not talk to person)

WHEN YOU ARE AT HOME

your grandparents

- male
- female

your parents

- father
- mother

your children

boys over 10
boys under 10
girls over 10
girls under 10

your brothers
your sisters

your grandchildren

- boys
- girls

your uncles
your aunts

other relatives

older (male)
older (female)
your age (male)
your age (female)
younger (male)
younger (female)
children

If R says all or none ask if person knows both Spanish and English.

Study 7: Spanish Usage Rating, Jersey City Responses

Coding

Card	Column	Item and Options
1-2	1	Study Number
1-2	2-4	Respondent Number
1-2	5	Card Number
		Note: respondent's ratings of the degree to which he uses Spanish are coded as follows in the remaining columns-- XX=interlocutor knows no English 10=all in Spanish 9=almost all in Spanish 7=about 70% in Spanish 5=about 50% in Spanish 3=about 30% in Spanish 1=only a few Spanish words YY=interlocutor knows no Spanish
1	6-33	Spanish usage in school (see Appendix)
	34-47	Spanish usage at work (see Appendix)
	48-67	Spanish usage at church (see Appendix)
	68-79	Spanish usage in the neighborhood (see Appendix)
2	6-21	Spanish usage in the neighborhood (see Appendix)
	22-63	Spanish usage at home (see Appendix)

Appendix

Card	Column	
		School
		In the classroom before or after class
1	6-7	teachers
	8-9	close friends (boys)
	10-11	other boys
	12-13	close friends (girls)
	14-15	other girls
		In the classroom during class (whispering)
	16-17	close friends (boys)
	18-19	other boys
	20-21	close friends (girls)
	22-23	other girls
		In the corridors
	24-25	teachers
	26-27	close friends (boys)
	28-29	other boys
	30-31	close friends (girls)
	32-33	other girls
		Church
		Church members
	48-49	older (male)
	50-51	older (female)
	52-53	your age (male)
	54-55	your age (female)
	56-57	younger (male)
	58-59	younger (female)
	60-61	children
		Clergy
	62-63	priests (confession)
	64-65	priests (other times at church)
	66-67	ministers

Card	Column	
		Work
1	34-35	Your boss (the person who tells you what to do)
		Fellow workers (the people you work with)
	36-37	older (male)
	38-39	older (female)
	40-41	same age (male)
	42-43	same age (female)
	44-45	younger (male)
	46-47	younger (female)
		Neighborhood
		People who live in your building
1	68-69	older (male)
	70-71	older (female)
	72-73	your age (male)
	74-75	your age (female)
	76-77	younger (male)
	78-79	younger (female)
2	6-7	children
		Others who live in the neighborhood
	8-9	older (male)
	10-11	older (female)
	12-13	your age (male)
	14-15	your age (female)
	16-17	younger (male)
	18-19	younger (female)
	20-21	children

Appendix

Card	Column	
		Home
		your grandparents
2	22-23	male
	24-25	female
		your parents
	26-27	father
	28-29	mother
		your children
	30-31	boys over 10
	32-33	boys under 10
	34-35	girls over 10
	36-37	girls under 10
	38-39	your brothers
	40-41	your sisters
		your grandchildren
	42-43	boys
	44-45	girls
	46-47	your uncles
	48-49	your aunts
		other relatives
	50-51	older (male)
	52-53	older (female)
	54-55	your age (male)
	56-57	your age (female)
	58-59	younger (male)
	60-61	younger (female)
	62-63	children

[4. Word Naming]

A. ENGLISH

1. Now I'm going to ask you to tell me as many different English words as you can. Any words at all will be OK. They don't have to be big words or words they teach you at school. Just any words at all - like (pause, to give the effect of giving words at random) cat, table, pen. When I tell you to start, tell me as many different English words as you can. I'll tell you when to stop. Any questions?

OK, now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (1) above).

2. Now I'm going to ask you to tell me as many different English words as you can that name things you can see or find in a kitchen. Your kitchen or any other kitchen. Words like salt, spoon, rice. OK? OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (2) above).

3. Now I'm going to ask you to tell me as many different English words as you can that name things you can see or find in a neighborhood. Your neighborhood or any other neighborhood. Words like street, car, barbershop. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (3) above).

4. Now I'm going to ask you to tell me as many different English words as you can that name things you can see or find in a church. Your church or any other church. Words like candle, crucifix, bible. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (4) above).

5. Now I'm going to ask you to tell me as many different English words as you can that name things you can study in school. In any kind of school, elementary school, high school, or college. Anything you can study - like reading, chemical engineering, arithmetic. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (5) above).

6. Now I'm going to ask you to tell me as many different English words as you can that name jobs or occupations like doctor, machine operator, secretary. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine (make a check to the left of (6) above).

(Make sure that R has completed all parts
(each number should be checked) before
going on to the Spanish section.)

B. SPANISH

(Give instructions in Spanish)

1. Now I'm going to ask you to tell me as many different Spanish words as you can. They don't have to be big words or words they teach you in school. Just any words at all - like (pause) gato, mesa, pluma. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (1) above).

2. Now I'm going to ask you to tell me as many different Spanish words as you can that name things you can see or find in a kitchen. Your kitchen or any other kitchen. Words like sal, cuchara, arroz. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (2) above).

3. Now I'm going to ask you to tell me as many different Spanish words as you can that name things you can see or find in a neighborhood. Your neighborhood or any other neighborhood. Words like calle, carro, barberia. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (3) above).

4. Now I'm going to ask you to tell me as many different Spanish words as you can that name things you can see or find in a church. Your church or any other church. Words like vela, crucifijo, Biblia. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (4) above.)

5. Now I'm going to ask you to tell me as many different Spanish words as you can that name things you can study in school. In any kind of school - elementary school, high school, or college. Anything you can study - like leyendo, ingenieria quimica, arithética. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check next to the number (5) above).

6. Now I'm going to ask you to tell me as many Spanish words as you can that name jobs or occupations - like doctor, operador de machinas, secretaria. OK?

OK. Now. (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of (6) above).

(Make sure that R has completed each part
(each should be checked) before
going on to the next section.)

[7. Continuous Word Association]

A. SPANISH

(Give instructions in Spanish)

Now I'm going to give you some Spanish words. When I say a word, I want you to tell me all the different Spanish words it makes you think of. For example, if I say the word mar, it might make you think of words like (pause slightly between words to give the idea of "associating") agua - grande - azul - mojado - arena - playa - cielo - olas - barcos - and so forth. Now if I say the word montaña, what different Spanish words does it make you think of? (Encourage R to give several words). And if I say the word lago, what different Spanish words does it make you think of? (Encourage R to give several words. Use as many of the following practice words as you think necessary to give R the idea of what is wanted: silla, reloj, gato.)

Now when I give you a word, I want you to tell me all the different Spanish words it makes you think of. Tell me as many as you can. I'll tell you when to stop. OK?

escuela (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "escuela" above.)

factoría (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "factoría" above.)

iglesia (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "iglesia" above.)

calle (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "calle" above.)

casa (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "casa" above.)

(Make sure that R has responded to each word
(each should be checked)
before proceeding to the English part.)

B. ENGLISH

Now I'm going to give you some English words. When I give you a word, I want you to tell me all the different English words it makes you think of. OK?

school (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "school" above.)

factory (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "factory" above.)

church (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "church" above.)

street (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "street" above.)

home (When one minute has elapsed, say) Good, that's fine. (Make a check to the left of the word "home" above.)

(Make sure that R has responded to each word
(each should be checked)
before proceeding to the next section.)

Study XO: Word Naming and Word Association (Jersey City)

Coding

Card	Col.	Item and Options
1	1	Study Number
	2-4	Subject Number
	5	Card Number
	6-7	W.N. General English
	8-9	W.N. Kitchen English
	10-11	W.N. Neighborhood English
	12-13	W.N. Church English
	14-15	W.N. School English
	16-17	W.N. Work English
	18-19	W.N. Human Ratio, General English
	20-21	W.N. General Spanish
	22-23	W.N. Kitchen Spanish
	24-25	W.N. Neighborhood Spanish
	26-27	W.N. Church Spanish
	28-29	W.N. School Spanish
	30-31	W.N. Work Spanish
	32-33	W.N. Human Ratio, General Spanish
	34-35	W.A. School English
	36-37	W.A. School Spanish
	38-39	W.A. Factory English
	40-41	W.A. Factory Spanish
	42-43	W.A. Church English
	44-45	W.A. Church Spanish
	46-47	W.A. Street English
	48-49	W.A. Street Spanish
	50-51	W.A. Home English
	52-53	W.A. Home Spanish
	54-55	blank
	56-57	blank
	58-59	W.A. Human Ratio, School English
	60-61	W.A. Human Ratio, Factory English
	62-63	W.A. Human Ratio, Church English
	64-65	W.A. Human Ratio, Street English
	66-67	W.A. Human Ratio, Home English
	68-69	W.A. Human Ratio, School Spanish
	70-71	W.A. Human Ratio, Factory Spanish
	72-73	W.A. Human Ratio, Church Spanish
	74-75	W.A. Human Ratio, Street Spanish
	76-77	W.A. Human Ratio, Home Spanish

[THE CONTEXTUALIZATION OF YOUNG SCHOOLCHILDREN'S BILINGUALISM]

[Interview Schedule]

A. Spanish Usage Rating

1. Are there some kids in your class who can speak Spanish and English like you?

2. Who are they?

3. When you're playing at recess do you talk to (gives names respondent has mentioned - same sex)?

4. What language do you use?

    a. If child replies "English" ask "do you ever use Spanish?".
        1. If child replies "yes" ask "which language do you use more?".
        2. If he says "no" proceed to question 5.

    b. If child replies "Spanish" ask "do you ever use English?".
        1. If child replies "yes" ask "which language do you use more?".
        2. If he says "no" proceed to question 5.

5. When you're with (same sex names) in the class

    a. What language do you use when you whisper? (proceed as above)
    b. What language do you use when you talk? (proceed as above)

6. Does the teacher use Spanish when she talks to you?

    a. If the response is "yes" determine how much as above.
    b. If the answer is "no" ask "does your teacher know Spanish?".
        1. If the response is either "yes" or "no" proceed to question 7.
        2. If the child replies "well a little" determine how much, as above, and proceed to question 7.

7. Are there other men and women in the school who use Spanish when they talk to you?

    a. Determine whether they know English.
    b. If bilingual determine which language is used more, as above.

8. When you go to church do you go to the Spanish Mass or the English Mass?

9. When you're outside the church - waiting for the service to start - do you use Spanish when you talk to

    a. (same sex) your own age?
        1. If response is "no" ask "do they know Spanish?"; proceed to question 10.
        2. If response is "yes" ask "do you use English?".
            a. If answer is "yes" ask "which language do you use more?".
            b. If answer is "no" ask "do they know English?".

    b. (same sex, older)? Proceed as above.

    c. Grownups? Proceed as above.

10. Do you know Father Call?

    a. When you're outside the church does he use Spanish when he talks to you? Proceed as above.

    b. Do any of the fathers use Spanish when they talk to you? Proceed as above.

    c. Do any of the sisters use Spanish when they talk to you? Proceed as above.

11. Where do you live?

12. When you're on your block outside your house, do you use Spanish when you talk to

    a. (same sex) your own age? Proceed as above.

    b. (same sex, older)? Proceed as above.

    c. Grownups? Proceed as above.

13. Who lives at home with you? (For each individual mentioned determine how much Spanish is used. When response is "all Spanish" find out if speaker knows English.)

B. Word Naming Task[1]

1. Now we're going to play a kind of word game. I want you to think about your kitchen. Think of all the different things you can see and find there. You can find lots of things there - like a table, bread, salt. What other things can you find there? How many can you tell me? Tell me as many as you can. (After 45 seconds have elapsed proceed to the next item.)

2. Now I want you to think about school. Think of all the different things you can see or find there, like a blackboard, books, chalk (as above).

3. (As above for church: candles, a bible).

4. (As above for your block: pump, cars).

5. Now let's go back to your kitchen. You can find things there like mesa, pan, sol. How many other things can you tell me in Spanish. Tell me as many as you can.

6. (As above for school: pizzara, libros, tiza).

7. (As above for church: velas, la Biblia).

8. (As above for your block: pompa or carros).

---

[1] Initial language if response was alternated.

(IV-3-a)

[Test of Individual Differences]
[(Word Association, English)]

Your name____

Your age__________

Your sex F___ M___

Your grade__________

On the following pages you will find five English words, each printed on the top of a separate page.

Underneath each printed word write down the first ten different words that the printed word brings to your mind. For example, the word SCHOOL may bring to your mind such words as students, blackboard, teacher, books, etc. Be sure that all the words you write are in English.

The numbers underneath each printed word will help you to list the words you write. Write the first word that comes to your mind next to number 1, the second word next to number 2 and so on. For each printed word write exactly ten words. The best way to do it is to write the words as soon as they come to your mind. Since this is a test of individual differences, any words you write will be accepted.

Before you start, please reread the above instructions.

SCHOOL

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
9. ____________________
10. ____________________

Turn to next page

(IV-3-a)

HOME

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

CHURCH

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

STREET

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

FACTORY

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

Do most of your friends plan to go to college?

Yes___ No___

(IV-3-a)

[Test of Individual Differences]
[(Word Association, Spanish)]

Your name____________________________________

Your age__________

Your sex F___ M___

Your grade__________

On the following pages you will find five Spanish words, each printed on the top of a separate page.

Underneath each printed word write down the first ten different Spanish words that the printed word brings to your mind. For example, the word ESCUELA may bring to your mind such words as estudiantes, pizzara, maestro, libros, etc. Be sure that all the words you write are in Spanish.

The numbers underneath each printed word will help you to list the words you write. Write the first word that comes to your mind next to number 1, the second word next to number 2 and so on. For each printed word write exactly ten words. The best way to do it is to write the words as soon as they come to your mind. Since this is a test of individual differences, any words you write will be accepted.

Before you start, please reread the above instructions.

ESCUELA

1. ____________________
2. ____________________
3. ____________________
4.. ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
9. ____________________
10. ____________________

Turn to next page

(IV-3-a)

CASA

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

(IV-3-a)

IGLESIA

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Turn to next page

(IV-3-a)

CALLE

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

Turn to next page

FACTORÍA

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

Turn to next page

(IV-3-a)

Do most of your friends plan to go to college?

Yes___ No___

(IV-3-a)

[BILINGUAL PERSON ORIENTATION AND FUTURE ORIENTATION]

[Test of Individual Differences]
[(Incomplete Sentences, Spanish)]

Your name ______________________________

Your age __________

Your sex F___ M___

Your grade __________

Instructions:

On the next page you will find six pairs of incomplete sentences. Choose one sentence from each pair and complete it. If you choose to complete sentence (a) in any pair, do not complete sentence (b). If you choose to complete sentence (b) in any pair, do not complete sentence (a). When you finish, you should have six completed sentences and six incomplete sentences.

This is a test of individual differences. There is no right or wrong answer. Therefore, any way in which you choose to complete a sentence will be accepted.

(IV-3-a)

Par 1.

a) En tiempos pasados la gente era religiosa, porque______________________

____

b) En el futuro la gente será religiosa, porque__________________________

____

Par 2.

a) Es bueno hacer nuevas amistades, porque______________________________

____

b) Es bueno conservar viejas amistades, porque__________________________

____

Par 3.

a) El año pasado la escuela fué muy difícil para algunos estudiantes,

porque____

b) El año entrante la escuela será muy difícil para algunos estudiantes,

poruqe____

Par 4.

a) En tiempos pasados los vecinos eran necesarios, porque______________

____

b) En el futuro los vecinos serán necesarios, porque____________________

____

Par 5.

a) Cuando uno tiene 20 años, uno respeta a su padre, porque____________

____

b) Cuando uno tiene 10 años, uno respeta a su padre, porque____________

____

Par 6.

a) En el futuro, los hombres trabajarán duro en su trabajo, porque

____

b) En tiempos pasados, los hombres trabajabán duro en su trabajo, porque

____

(IV-3-a)

[Test of Ind l Dif nces]
[(Incomplete nces, ish)]

Your name________________ ___ ___

Your age________

Your sex F___ M___

Your grade________

Instructions:

On the next page you will find six pairs of incomplete sentences. Choose one sentence from each pair and complete it. If you choose to complete sentence (a) in any pair, do not complete sentence (b). If you choose to complete sentence (b) in any pair, do not complete sentence (a). When you finish, you should have six completed sentences and six incomplete sentences.

This is a test of individual differences. There is no right or wrong answer. Therefore, any way in which you choose to complete a sentence will be accepted.

Pair 1.

a) In the past people were religious, because________________________

____

b) In the future people will be religious, because____________________

____

Pair 2.

a) It is good to make new friends, because_________________________

____

b) It is good to keep old friends, because__________________________

____

Pair 3.

a) Last year school was very difficult for some students, because_____

____

b) Next year school will be very difficult for some students because__

____

Pair 4.

a) In the past neighbors were needed, because_______________________

____

b) In the future neighbors will be needed, because___________________

____

Pair 5.

a) When one is twenty years old, one respects his father, because_____

____

b) When one is ten years old, one respects his father, because_______

____

Pair 6.

a) In the future men will work hard at their jobs, because____________

____

b) In the past men worked hard at their jobs, because________________

____

[THE CONTEXTUALIZATION OF BILINGUAL PERFORMANCE: A COMPARATIVE ANALYSIS]

Interview Schedule

I. Word Naming - English (Yiddish)[1]

A. "I'm going to ask you to tell me as many different English (Yiddish) words as you can. They don't have to be big words or words they teach in school. Just any words at all - like (pause) cat (kahtz), table (tish), pen (feder). OK? Begin." (After one minute has elapsed - "Good, that's fine").

B. "Now I'm going to ask you to tell me as many different English words as you can that name things that you find in a kitchen - your kitchen or any other kitchen. Words like (pause) salt (zaltz), spoon (lefl), potato (kartofl). OK? Begin." (After one minute has elapsed - "Good, that's fine").

C. "Now I'm going to ask you to tell me as many different English words as you can that name things you can see or find in a neighborhood - your neighborhood or any other neighborhood. Words like (pause) street (gas), car (mashin), laundry (vesheray). OK? Begin." (After one minute -"Good, that's fine").

D. "Now I'm going to ask you to tell me the names of as many English language writers as you can, like Shakespeare, Faulkner, Hemingway (Sholem Aleichem, Peretz, Edelshtat). OK? Begin." (After one minute - "Good, that's fine").

E. "Now I'm going to ask you to tell me as many different English words as you can that name things that you would see at a Passover Seder. Words like (pause), matzoh (matse), tablecloth (tishtekh), wine (vayn). OK? Begin." (After one minute - "Good, that's fine").

F. "Now I'm going to ask you to tell me as many different English words as you can that name jobs or occupations. Words like (pause) doctor (dokter), tailor (shnayder), teacher (lerer). OK? Begin." (After one minute - "Good, that's fine").

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[1] The directions for the Yiddish subtests are direct translations of the English instructions. Yiddish stimuli are given in parentheses.

II. Yiddish Usage Rating

Now I'm going to ask you to tell me how much of your talk is in Yiddish when you speak to people who know both Yiddish and English.

I'll ask you about different people who might know both Yiddish and English. They might not know them equally well, but they might be able to speak and understand at least a little of each.

If they know only one language, tell me. Or if you don't speak to the person I mention, tell me. But if you speak to the person, and if he knows both Yiddish and English, tell me how much of your talk with him is in Yiddish. Tell me if its:

all in Yiddish

almost all in Yiddish (only a few English words)

about 70% in Yiddish

about half in Yiddish

about 30% in Yiddish

only a few Yiddish words

none in Yiddish

(Review categories with R and ask him to repeat them). If R says all in Yiddish or none in Yiddish, ask if person he is talking about knows both languages.)

A. Home

When you are at home, how much of your talk is in Yiddish to your:

Spouse

husband
wife

Children

boys
girls

Grandchildren

boys under 10
boys over 10

girls under 10
girls over 10

Other relatives

older men
older women
men your age
women your age
younger men
younger women
children

B. Holidays

When you are at a Passover Seder how much of your talk is in Yiddish to:

Spouse

- husband
- wife

Children

- boys
- girls

Grandchildren

- boys over 10
- boys under 10
- girls over 10
- girls under 10

Other relatives

- older men
- older women
- men your age
- women your age
- younger men
- younger women
- children

Non-related guests

- adults
- children

C. Cultural

When you are at a meeting of a Yiddish Reading Group or Cultural Club, how much of your talk is in Yiddish to:

Other participants:

- older men
- older women
- men your age
- women your age
- younger men
- younger women

Jewish literary or cultural personalities at this meeting

- older men
- older women
- men your age
- women your age
- younger men
- younger women

D. Occupations
When you were (or are) at work, how much of your talk was (is) in Yiddish to:

Your boss (foreman)

Fellow workers

older men
older women
men your age
women your age
younger men
younger women

E. Neighborhood
When you are in your neighborhood, how much of your talk is in Yiddish to:

People who live in your building

older men
older women
men your age
women your age
younger men
younger women

Others who live in your neighborhood

older men
older women
men your age
women your age
younger men
younger women

[Transcriptions of Conversations Used with "Multivariate" Items]
[(study 8)]

First Conversation

First boy Well, I'll see you tomorrow and if anything happens, just call me up.

Second boy Hey listen, don't go yet, my mom says she cooked some food and she wants me to ask you to stay.

First boy Na, that's okay. I gotta go home anyway. It's about seven o'clock and my mother's probably waiting for me anyway, anyway. So thanks anyway, I'll see you.

Mother Pero mira Louie tu no te vas a quedar a comer?
(But look Louie aren't you going to stay and eat?)

First boy No, gracias, es que tengo que ir a casa y ya es tarde y
(No, thank you, it's just that I have to go home and it's late already

tengo que hacer un trabajo de la escuela y mi mama me
and I have to do homework and my mother

está esperando.
is waiting.)

Mother No, pero mira, si ya servi la comida.
(No, but look, I've already served the food.)

First boy Bueno, no gracias, lo siento pero tengo que irme porque ve
(Well, no thank you, I'm sorry but I have to go because you see

mami me está esperando.
my mother is waiting for me.)

Second boy Louie, todavía es temprano si allí esta en la mesa.
(Louie, it's still early, it's there on the table already.)

Mother Sí, no me vas a despreciar, no?
(Yes, you're not going to say no to me, no?)

First boy	Well, I'll guess I'll stay but I gotta leave early.
Mother	Ahora sí, está bien entonces. (Well now, everything's fine then.)

Second Conversation

Mother	Hello, quién habla? (Who's speaking?)
Boy	Quiero hablar, si es posible con Delilah. (I want to speak to, if it's possible with Delilah.)
Mother	Quién es? (Who is it?)
Boy	Puede decir que es Tony Figueroa. (You can say it's Tony Figueroa.)
Mother	Un momentito, por favor. Dalila, Dalila te quieren hablar (One moment, please. Delilah, Delilah, they want to speak to you en el teléfono. Un tal Tony Figueroa. on the phone. A Tony Figueroa.)
Girl	Hello?
Boy	Hello, Delilah.
Girl	Ah, who is this?
Boy	Tony Figueroa.
Girl	Oh hi.
Boy	Hi, how are you.
Girl	Okay.
Boy	Listen, what are you doing Saturday night?
Girl	Saturday? Nothing really. Why?
Boy	I wanted to see if you wanted to go downtown and see a movie with me.

Girl — Oh, ah, that sounds nice. Hold on a second, I have to

ask my mother. Mami, tu sabes ese muchacho Tony Figueroa?
(Mother, do you know that fellow Tony Figueroa?)

Mother — No, no lo conozco. Quién es?
(No, I don't know him. Who is he?)

Girl — Tu lo conosiste en casa de Trinidad te arecuerdas?
(You met him at Trinidad's house, do you remember?)

Mother — Cuándo?
(When?)

Girl — La semana pasada.
(last week.)

Mother — O, aquel alto, medio gordito.
(Oh, that tall one, rather chubby.)

Girl — Sí, ese mismo.
(Yes, that's the one.)

Mother — Sí, sí me recuerdo. Y qué?
(Yes, yes I remember. So what?)

Girl — Bueno él quiere que yo salga al cine con él el Sabado.
(Well he wants me to go to the movies with him on Saturday.)

Mother — El Sabado?
(Saturday?)

Girl — Sí, el Sabado.
(Yes, Saturday.)

Mother — Bueno, te voy a decir, yo no se, a mi me pides permiso
(Well, I am going to say, I don't know, you ask me permission

pero al quién le tienes que hablar es a tu padre.
but the one you have to speak to is your father.)

Girl — Bueno..........
(Well..........)

Mother — Y otra cosa que tengo que decir si el muchacho viene, si tu
(And another thing I have to say if that boy comes here, if you

sales con él tiene que veniraquí, tengo que conocerlo, tu
go out with him he has to come here, I have to meet him, your

	padre tiene que conocerlo. father has to meet him.)
Girl	Tu sabes que él es lo mas nice. (You know he is very nice.)
Mother	Bueno, allá con tu padre. Tu lo arrreglas con tu padre. (Well, that's up to your father. You fix it with your father.)
Girl	Okay, okay. Ah, hello Tony.
Boy	Yeah.
Girl	Listen, can you call back later? I have to ask my father.
Boy	Sure, about what time?
Girl	About eight o'clock.
Boy	Okay, I'll call you back later.
Girl	Okay, bye.
Boy	Bye.

Third Conversation

First girl	No, I kid you not. I think what's being done with it is a farce. You know, in Latin America they call Puerto Rico "La Colonia Perfumada."
Second girl	Why?
First girl	Because they feel it's just a nice way of putting perfume on something that stinks, you know.
Second girl	What would happen in Puerto Rico if it were independent?
First girl	Then I ask you that. If you are going to have a piece of dirt don't call it dust. If it's dirt, you know....
Boy	And what else can you call it? Can you call it a state?

First girl	Listen, you know what you can call it. Call it a colony. The same situation that existed con, with the whole business of England and the colonies here. Well, it's the same thing except that it's put in a political framework of today's world, that's all. It's a nice way of getting away with murder.
Boy	Okay, but why? Isn't it because the people are not actually that capable of being able to rule?
First girl	Stop. Now you're putting down your own people. Because...
Boy	I'm not exactly putting down my own people.
First girl	Yes and don't tell me that the United States is the only one that has been able to in Puerto Rico....
Boy	Okay, so you have a couple of people like Moscoso and Luis Ferrer.
First girl	Un momento. (One moment.)
Boy	Bueno. (Well.)
First girl	Un momento. (One moment.)
Boy	Have you got people capable of starting something like the....
First girl	The Communists. (sarcastically)
Boy	Like General Motors or wait a second. You're going to tell me that un pobre campesino encima de una montaña (A poor farm hand on top of a mountain) is able to come down to the town and run something like in Utuado the plant that was

Second girl	Wait a second. (Everyone yelling at once.)
Boy	But they don't bother taking things over like that.

Fourth Conversation

Boss	Carmen, do you have a minute?
Secretary	Yes Mr. Gonzalez.
Boss	I have a letter to dictate to you.
Secretary	Fine. Let me get my pen and pad. I'll be right back.
Boss	Okay.
Secretary	Okay.
Boss	Okay, this is addressed to Mr. William Bolger.
Secretary	That B-o-r-g-e-r?
Boss	B-o-l
Secretary	Oh, oh, I see.
Boss	Okay. His address is in the files.
Secretary	Okay.
Boss	Okay. Dear Bill, Many thanks for telling me about your work with the Science Research Project. The information you gave me ought to prove most helpful.
Secretary	That was "The information you gave me ought to prove most helpful."
Boss	Correct.
Secretary	Okay.
Boss	Ah, particularly the data about recency of arrival by Junior High School.
Secretary	Okay.

Boss Okay, ah. I very much appreciate the time you gave me. Never mind, strike that out. Ah, enclosed are two of the forms that you let me borrow. I'll be sending back the data sheets very soon. Thanks again. I hope that your hospital stay will be as pleasant as possible and that your back will be soon in top shape. Will soon be in top shape. It was nice seeing you again. Sincerely, Louis Gonzalez.

Secretary Do you have the enclosures for the letter Mr. Gonzalez?

Boss Oh yes, here they are.

Secretary Okay.

Boss Ah, this man William Bolger got his organization to contribute a lot of money to the Puerto Rican parade. He's very much for it. Tu fuiste a la parada?
(Did you go to the parade?)

Secretary Sí, yo fui.
(Yes, I went.)

Boss Si?
(Yes?)

Secretary Um huh.

Boss Y cómo te estuvo?
(And how did you like it?)

Secretary Hay, lo mas bonita.
(Oh, very pretty.)

Boss Sí, porque yo fui y no nunca había participado en la parada
(Yes, because I went and I had never participated in the parade

y este año me dio curiosidad por ir a ver como era y
and this year I became curious to go and see how it was and

estuvo eso fenómeno. Fui con mi señora y con mis nenes
that was a phenomenon. I went with my wife and my children

y eso y a ellos tambien le gustó mucho. Eh, y tuve
and that and they also liked it very much. And I had

un día bien agradable. Ahora lo que me molesta a mi
a very pleasant day. Now what bothers me

es que las personas cuardo viene una coas así, la
is that people when something like this comes along, the

parada Puertoriqueña o la fiesta de San Juan, corren
Puerto Rican parade, or the festival of San Juan they run

de la casa a participar porque es una actividad festiva,
from the house to participate because it is a festive activity,

alegre y sin embargo cuando tienen que ir a la iglesia,
happy and then when they have to go to church

o la misa para pedirle
or to mass, to ask)

Secretary (Laughter)

Boss A Dios entonce no van.
(God then they don't go.)

Secretary Si, entonces no van.
(Yes, then they don't go.)

Boss Pero, así es la vida, caramba. Do you think that you could get
(But that's life, you know.)

this letter out today?

Secretary Oh yes, I'll have it this afternoon for you.

Boss Okay, good, fine then.

Secretary Okay.

Boss Okay.

Fifth Conversation

Priest Buenos días Herbie, como estás?
(Hello Herbie, how are you?)

Boy

Bien Padre y Ud.?
(Very well Father and you?)

Priest

Y como está la familia?
(And how is the family?)

Boy

O ellos estan muy bien. Lo unico que tengo es un tío de
(Oh they're all right. The only thing is that an uncle of

Mami que me escribieron ésta semana en una carta special
Mother's that they wrote to me this week a special delivery

delivery que está muy grave y Mami sale para allá, para
letter that he is very sick and mother is going over there

Puerto Rico.
to P.R.)

Priest

Y que tiene - un ataque del corazón?
(And what is the matter - a heart attack?)

Boy

No, los medicos dicen que es que tiene cancer.
(No, the doctors say he has cancer.)

Priest

Hay, bendito!
(Oh, dear!)

Boy

Uh huh, y le dan muy poco tiempo para vivir así es que
(and they give him very little time to live so that

Mami va.
Mother is going.)

Priest

Mami esta muy nerviosa?
(Your mother is very upset?)

Boy

Esta bastante nerviosa. Pero Padre, cambiando el tema,
(She's quite upset. But Father, changing the topic,)

the reason that I came here is cause as I was telling you before I'm going into college and I wanted to see if you could give me a letter of recommendation in order for me to get into the special program that they are offering. I need this to go out by next week some time.

Priest O lo mandamos hoy. Que quiere que yo escriba?
(Oh I'll send it today. What do you want me to write?)

Boy Oh just a letter of recommendation tell them that you know me, about my character.

Priest Who is it to?

Boy It's going to be Dr. Mack.

Priest Do you know the first name and the middle initial?

Boy Well, I have the form that you can fill it out and....

Priest O eso es mejor.
(Oh that's fine.)

Boy Okay?

Priest Yeah, because you have to send it to the man and you have to have his name right. Si no se hace asi es un
(If you don't do it like that it's an

insulto.
insult.)

Boy Entonces le quiero dar las gracias Padre. Entonces lo veo
(Then I want to thank you Father. Then I'll see you

por ahi en la misa el domingo? Esta bien?
in the Mass Sunday? Is it alright?)

Priest Si, como no.
(Yes, of course.)

Boy Okay adios.
(goodbye.)

(IV-4-a)

[1. CONVERSATIONS]

Now I'd like to play some recordings for you. These are recordings of people talking to each other. I'll play each recording twice. Then I'll ask you to tell me what you heard.

Conversation One (The Invitation)

A. Now for the first story. What was happening here? Try to tell me what each one said. If you can, try to use the words that the speakers used. When they spoke in Spanish, try to use Spanish. And when they spoke in English try to use English.

B. I know you may have already said this, but I want to make sure I didn't miss anything.

1.0 Who were talking?
    1.01 How do they know each other?
        1.001 Are they strangers or what?
2.0 Where were they talking?
3.0 Why were they talking?
    3.01 Were they talking just to pass the time (to "make conversation") or was there some other reason?
    3.02 The two boys at the beginning of the story
    3.03 The three speakers
4.0 Do you remember if anyone mentioned the time?
    4.01 What time was it?
5.0 Do you remember who asked the boy to stay first?
6.0 When the mother asked the boy to stay, where was the food?
7.0 Did the boy agree to stay?
    7.01 How long was he going to stay?

C. Do you remember who used English and who used Spanish. And when?

1.0 Would it have made any difference if the mother asked him to stay in English instead of Spanish?
    1.01 Would it have been as nice, the same, or not as nice in English?
        1.001 Imagine that everyone knew English and Spanish equally well.

D. Que cree Usted?

1.0 How friendly are the boys?
2.0 Did the mother really want the boy to stay?
    2.01 Was she just being polite?
3.0 Did the boy really want to stay?
    3.01 Was he just being polite when he said he couldn't stay?
4.0 At the very end, who was the boy (guest) talking to?
5.0 Le ha pasado a Ud. algo asi?
    5.01 Si alguien le visita, cree Usted que tiene un deber de ofrecerle algo?

Conversation Two (The date)

A. Now for the second story. What was happening here? Try to tell me what each one said. If you can, try to use the words the speakers used. When they spoke in Spanish, try to use Spanish, and when they spoke in English, try to use English.

B. I know you may have already said this, but I want to make sure I didn't miss anything.

1.0 Who were talking?
    1.01 How do they know each other?
        1.001 Are they strangers or what?
2.0 Where were they talking?
3.0 Why were they talking?
    3.01 Were they talking just to pass the time or was there some other reason?
    3.02 The mother and the boy
    3.03 The mother and the girl (the first time)
    3.04 The boy and the girl (the first time)
    3.05 The mother and the girl (the second time)
    3.06 The boy and the girl (the second time)
4.0 Did the mother ask the boy his name?
5.0 Where did the boy want to take the girl?
    5.01 Where was the movie?
6.0 When did the boy want to go?
    6.01 What time of day?
7.0 Had the mother met the boy before?
    7.01 Where?
    7.02 When?
8.0 Did anyone mention what he looked like?
    8.01 What did he look like?
9.0 Did the mother say the girl could go out with him?
10.0 The mother said that if the girl goes out with him, she would have to do something first. Do you remember what it was?
11.0 What did the girl say to the boy when she got back on the phone?
    11.01 What did she tell him to do?

C. Do you remember who used Spanish and who used English? And when?

1.0 Would it have made any difference if the boy had used Spanish, instead of English, to ask the girl to go out with him?
    1.01 Would it have been as good, the same, not as good?
    1.02 What would the girl have thought about him?
        1.002 Imagine that they knew English and Spanish equally well.

D. Que Cree Ud.?
- 1.0 How well do the boy and the girl know each other?
  - 1.01 Do they see a lot of each other?
- 2.0 Did the girl really want to go out with him?
  - 2.01 Was she trying to put him off - trying to get an excuse for not going out with him?
- 3.0 Was it OK with the mother for the girl to go out with him?
  - 3.01 Did the mother want her to stay home or to go out?
- 4.0 Does the daughter really have to get permission to go out?
  - 4.01 Does she ask only as a formality?
  - 4.02 Could the mother say no?
    - 4.002 If the mother said no, would the girl have to stay home?
- 5.0 Will the boy call back?
- 6.0 Would you let her go out?
  - 6.01 What if she went out without permission?
- 6.1 Is there any difference between now and before?

Conversation Three (Status of Puerto Rico)

A. Now for the third story. What was happening here? Try to tell me what each one said. If you can, try to use the words that the speakers used. When they spoke in English, try to use English, and when they spoke in Spanish, try to use Spanish.

B. I know you may have already said this, but I want to make sure I didn't miss anything.

1.0 Who were talking?
    1.01 How do they know each other?
        1.001 Are they strangers or what?
        1.002 Where do they know each other from?
2.0 Where were they talking?
3.0 Why were they talking?
    3.01 Were they talking just to pass the time or was there some other reason?
4.0 What were they talking about?
    4.01 Were they talking about a particular problem in Puerto Rico?
5.0 The girl said that in Latin America, they call Puerto Rico something. Do you remember what it was?
    5.01 Why do they call it that (according to her)?
6.0 Does she think that Puerto Rico should be called a Commonwealth?
    6.01 What name did she say would be better?
7.0 Does she think it should stay a Commonwealth?
8.0 Does the boy?
    8.01 Why?
9.0 Where was the factory that he mentioned?
10.0 What did the girl mean when she said "If you have a piece of dirt, don't call it dust"?

C. Do you remember who used Spanish and who used English? And when?

1.0 Why do you think the boy said "un pobre compesino encima de una montana" in Spanish?
    1.01 Would it have meant the same thing in English?
    1.02 Would it have been better, the same, worse in English?
        1.002 Imagine that everyone knows English and Spanish equally well.
2.0 Since the discussion was about Puerto Rico, should the conversation have been in Spanish?
    2.01 Imagine that everyone knows English and Spanish equally well.

D. Que cree Ud.?

1.0 How well do the people know each other?
2.0 Were they angry at each other?
3.0 How much schooling do they probably have?
4.0 Are they probably working now or are they students?

Conversation Four (Boss and Secretary)

A. Now for the fourth story. What was happening here? Try to tell me what each one said. If you can, try to use the words that the speakers used. When they spoke in Spanish, try to use Spanish, and when they spoke in English try to use English.

B. I may ask you to repeat something you've already said, but I want to make sure I don't miss anything.

1.0 Who were talking?
    1.01 How do they know each other?
2.0 Where were they talking?
3.0 Why were they talking?
    3.01 Were they talking just to pass the time or was there some other reason?
    3.02 The first part of the story.
    3.03 The second part of the story.
4.0 What did the man ask the girl to do?
    4.01 What was he writing?
5.0 Why was he writing?
    5.01 What was he thanking the man for?
6.0 Was he sending anything with the letter?
    6.01 What was he sending?
7.0 Who went to the parade?
8.0 How did they like it?
    8.01 What didn't he like about it?

C. Do you remember who used English and who used Spanish? And when?

1.0 Would it have made any difference if the man had used English to talk about the parade?
    1.01 Imagine that they both knew English and Spanish equally well.
2.0 Why do you think he used Spanish to talk about the parade?

D. Que cree Ud.?

1.0 What kind of job does the man have?
    1.01 How important is his job?
        1.001 How much schooling does he probably have?
2.0 What kind of job does the man he wrote to have?
    2.01 Is it more important, as important, or less important than his own job?
3.0 Do the two men probably see each other outside of work - or only at work?
4.0 How much do the speakers (the boss and secretary) like each other?
5.0 Was that the right way for a boss to talk?
6.0 Do you have a boss?
    6.01 How does he treat you?

Conversation Five (Priest and Parishioner)

A. Now for the fifth story. What was happening here? Try to tell me what each one said. If you can, try to use the words that the speakers used. When they spoke in English, try to use English and when they spoke in Spanish, try to use Spanish.

B. I know you may have already said this, but I want to make sure I didn't miss anything.

1.0 Who were talking?
  1.01 How do they know each other?
2.0 Where were they talking?
3.0 Why were they talking?
  3.01 Were they talking just to pass the time or was there some other reason?
4.0 What happened to the boy's uncle?
  4.01 What was wrong with him?
5.0 How did the boy find out about his uncle?
6.0 What did the boy want the priest to do?
  6.01 Why did the boy want him to do it?
7.0 Did the priest agree?
8.0 What did the priest ask the boy about the letter?

C. Do you remember who used English and who used Spanish? And when?

1.0 Would it have made any difference if they had spoken about the boy's family and about the uncle in English?
  1.01 Imagine that both speakers know English and Spanish equally well.
  1.02 Would it have been better, the same, or worse in English?
2.0 Would it have made any difference if they had spoken about the letter of recommendation in Spanish?
  2.01 Imagine that both speakers know English and Spanish equally well.
  2.02 Would it have been better, the same, or worse in Spanish?
3.0 Why do you think the boy changed from Spanish to English when he asked the priest to write a letter for him?
4.0 Would it have been better to use the same language for the whole conversation?
  4.01 Which language?

D. Que cree Ud.?

1.0 Where does the priest come from?
  1.01 How can you tell?
2.0 Is the boy a member of the priest's church?
3.0 Do you think the boy addresses the priest in the right way?
  3.01 Respectfully?
4.0 What kind of letter will the priest write?
  4.01 A so-so one, a bad one, a good one?

Coding, Study 8: Multivariate Conversations (Jersey City)

Card	Column	Items and Options
1-3	1-5	Identification of study (1), respondent (2-4), card (5)
1	6	Interviewer: Casiano = 1; Herasimchuk = 2; Sperber = 3; Stieglitz = 4; more than one interviewer = 5

Note:--For each of the five stimulus conversations, each item is identified as eliciting one of the following types of response:

1) interpretation of role relationships--
2) interpretation of interactional function--
3) interpretation of setting--
4) comprehension of manifest content--
5) interpretation of "social" (latent) content--
6) identification of language usage--
7) interpretation of appropriateness of language choice--

The "keyed" response (the response corresponding to the effect that the actors in the conversations intended to convey) for each of the first six item types follows the identification of item type. For example, col. 7, card 1 refers to an item in which the respondent was asked to identify the relationship of two of the speakers in the first conversation. The "keyed" response is "mother and son". For the first six item types the keyed response is always coded as "1". Other interpretations (e.g., "husband and wife") are coded with other numerals. If a question has not been specifically asked by the interviewer, and if the respondent makes no statement from which his interpretation or comprehension can be inferred, the item is coded as a blank (-). Also scored as blank are responses which are "led" by the interviewer ("don't you think that--"). Ambiguous responses are coded as "9" unless specifically stated to the contrary.

card 1, columns 7-36 refer to story one

1	7	Interpretation of relationships--mother and son: as keyed = 1; relatives = 2; husband and wife = 3; husband and wife or mother and son = 4; don't know (don't remember) = 5; friends = 6; husband and wife or relatives = 7; husband and wife or brother and sister = 8.
	8	Interpretation of relationships--friends: as keyed = 1; relatives = 2; don't know (don't remember) = 3; other = 4.
	9	Interpretation of relationships score: number of ones in columns 7 + 8.

10 Identification of setting--home: as keyed = 1; don't know/remember = 2; other = 3.
Note: code "kitchen" as 1.

11 Interpretation of function--saying goodbye: as keyed = 1; don't know (don't remember) = 2; talking about a problem = 3.

12 Interpretation of function--invitation: as keyed = 1; don't know (don't remember) = 2; talking about food = 3; other = 4.

13 Interpretation of function score: number of ones in columns 11 + 12.

14 Manifest content--the time was about 7 P.M.: as keyed = 1; don't know (don't remember) = 2; afternoon = 3; evening = 4; late = 5; his mother expected him at 7 = 6; lunch-time = 7; other = 8.

15 Manifest content--first invitation extended by boy (male): as keyed = 1; by mother (woman) = 2; don't know/remember = 3; father = 4.

16 Manifest content--the food was on the table (being served, was served): as keyed = 1; being prepared (cooking) = 2; don't remember/know = 3; other = 4.

17 Manifest content--resolution of the story, boy stays for dinner: as keyed = 1; does not stay = 2; don't know/remember = 3.

18 Manifest content--the boy was not going to stay long: as keyed = 1; don't know/remember = 2.

19 English manifest content score: number of ones in columns 14, 15, 17, 18.

20 Total manifest content score: total of columns 16 + 19.

21 Situation score: total of columns 9, 20 + col. 10 (if scored as 1).

22 Social content--boys are friendly (good friends, very friendly): as keyed = 1; not friendly = 2; don't know (undecided) = 3.

23 Social content--mother's invitation sincere (She was not merely being polite): as keyed = 1; just being polite (not sincere) = 2; don't know (undecided) = 3.

24 Social content--guest accepted the invitation to be polite (he didn't really want to stay): as keyed = 1; wanted to stay (wasn't merely being polite) = 2; don't know (undecided) = 3; boy was ambivalent = 4.

25 Social content--person addressed at end of story by the guest was the mother: as keyed = 1; other boy = 2; both mother + son = 3; don't know = 4.

26 Social content score: number of ones in columns 22-25.

27 Language usage--(beginning of story), boys spoke English: as keyed = 1; Spanish = 2; don't know/remember = 3; 1st boy spoke English = 4; English used but don't know where = 5; 2nd boy used English = 6; Note: if R makes general statement that the boys spoke English, code as 1; Spanish, code as 2.

28 Language usage--mother used Spanish (exclusively): as keyed = 1; English = 2; don't know/remember = 3; Spanish used but don't know where = 4.

29 Language usage--son spoke Spanish (to guest) at middle of story: as keyed = 1; English = 2; use of Spanish at this point attributed to a third male = 3; don't know/remember = 4.

30 Language usage--guest spoke Spanish (to mother) in middle of story: as keyed = 1; English = 2; don't know/remember = 3.

31 Language usage--guest spoke English (to mother) at end of story: as keyed = 1; Spanish = 2; don't know/remember = 3.

32 Spanish language usage score: number of ones in cols. 28 - 30.

33 English language usage score: number of ones in cols. 27, 31.

34 Total language usage score: total of cols. 32 + 33.

35-36 Interpretation of choice of language for invitation:

a. Spanish more appropriate (better)
    1. without qualification, no reason given = 00
    2. Spanish should be used at home = 01
    3. Spanish is usually used at home = 02
    4. It is our custom to use Spanish = 03
    5. Spanish "understood" better even if everyone knows English = 04
    6. reason unclear = 05
    7. mas simpatico = 06

b. English more appropriate (better)
  1. without qualification, no reason given = 10
  2. English should be used in America = 11
  3. English should be used with Americans = 12
  4. English was used initially (by boys) = 13
c. No difference
  1. no qualification, no reason given = 20
  2. boy understood both languages = 21
d. ambiguous = 30

note: card 1, columns 37-76 refer to story two

37 Interpretation of relationships--boy + girl (unrelated): as keyed = 1; don't know/remember = 2; other = 3.

38 Interpretation of relationships--mother and daughter: as keyed = 1; don't know/remember = 2; sisters = 3; other = 4.

39 Interpretation of relationships score: number of ones in columns 37 + 38.

40 Interpretation of setting--home: as keyed = 1; don't remember/know = 2; telephone = 3.

41 Interpretation of function--boy asks to speak to girl: as keyed = 1; don't know/remember = 2; other = 3.

42 Interpretation of function--mother summons daughter to phone: as keyed = 1; don't know/remember = 2; other = 3.

43 Interpretation of function--boy asks girl for date: as keyed = 1; don't know/remember = 2; other = 3.

44 Interpretation of function--girl asks mother for permission: as keyed = 1; don't know/remember = 2; other 3.

45 Interpretation of function--girl relays answer to boy: as keyed = 1; don't know/remember = 2; other = 3.

46 Interpretation of function score: number of ones in columns 41 - 45.

47 Manifest content--mother (woman) does ask boy (man) his name (she asked him who he was): as keyed = 1; don't know/remember = 2; did not ask = 3.

48 Manifest content--the boy wanted to take the girl to the movies (theatre): as keyed = 1; don't know/remember = 2; he asked for a date = 3.

49 Manifest content--the movie was downtown: as keyed = 1; don't know/remember = 2; other = 3.

50 Manifest content--he wanted to go Saturday night: as keyed = 1; Saturday (without qualification) = 2; Saturday afternoon = 3; don't know/remember = 4; 8 P.M. = 5; tonight = 6.

51 Manifest content--the mother had met the boy before: as keyed = 1; don't know remember = 2; perhaps = 3; she had not met him = 4.

52 Manifest content--the mother had met him at Trini's house (at a friend's house, at someone else's house): as keyed = 1; don't know/remember = 2; at a party = 3; at a dance = 4; at her (mother's) house = 5.

53 Manifest content--the mother had met him a week before: as keyed = 1; don't know/remember = 2; other =3.

54 Manifest content--the boy was tall and chubby (fat): as keyed = 1; don't know/remember = 2; chubby (only) = 3; tall (only) = 4; other = 5.

55 Manifest content--the mother said that the girl must get her father's permission: as keyed = 1; don't know/remember = 2; boy must ask father's permission = 3.

56 Manifest content--the mother said that the girl must introduce the boy to her parents: as keyed = 1; don't know/remember = 2; other = 3.

57 Manifest content--the girl said that she had to ask her father: as keyed = 1; don't know/remember = 2; boy had to call and ask father = 3; boy must come to house to ask father = 4.

58 Manifest content--the girl asked the boy to call back: as keyed = 1; don't know/remember = 2; other = 3.

59 English manifest content score: number of ones in columns 49, 50, 57, 58.

60 Spanish manifest content score: number of ones in columns 47, 51-56.

61-62 Total manifest content score: total of columns 59 + 60 plus col. 48 (if scored as 1).

63-64 Situation score: total of columns 39, 61-62 plus col. 40 (if scored as 1).

65 Social content--the boy and girl do not know each other very well: as keyed = 1; don't know/remember = 2; good friends (see each other a lot) = 3.

66 Social content--the girl really wanted to go out with the boy (she was not putting him off): as keyed = 1; don't know/remember = 2; she did not really want to go out with him = 3; she wasn't very interested but she wasn't putting him off either = 4; she wanted more time to get to know him better = 5.

67 Social content--the daughter really must get permission from her parents: as keyed = 1; don't know/remember = 2; she doesn't need permission = 3.

68 Social content--the boy will probably call back: as keyed = 1; don't know/remember = 2; the boy probably won't call back = 3; perhaps he will call back = 4.

69 Social content score--total number of ones in columns 65-68.

70 Language usage--boy and girl spoke English to each other: as keyed = 1; don't know/remember = 2; spoke Spanish to each other = 3; used both E and S with each other = 4.

71 Language usage--boy spoke in Spanish to the mother: as keyed = 1; don't know/remember = 2; spoke English to the mother = 3.

72 Language usage--girl spoke in Spanish to the mother: as keyed = 1; don't know/remember = 2; spoke English to the mother = 3.

73 Spanish language usage score: total number of ones in columns 71 + 72.

74 Total language usage score: total of columns 73 and 70 (if scored as 1).

75-76 Interpretation of use of English to ask girl for date:
- a) Spanish more appropriate (better)
    - 1. without qualification, no reason given = 00
    - 2. Spanish should be used at home = 01
    - 3. Spanish is usually used at home = 02
    - 4. because they are Spanish = 03
- b) English more appropriate (better)
    - 1. without qualification, no reason given = 10
    - 2. English should be used in America = 11
    - 3. English should be used with Americans = 12
    - 4. English "prettier"
- c) No difference
    - 1. without qualification = 20
    - 2. girl understood both languages = 21
- d) ambiguous = 30

note: card 1, cols. 77-80 and card 2, cols. 6-31 refer to story three

1	77	Interpretation of relationships--friends (schoolmates, friends from school): as keyed = 1; family = 2; husband and wife = 3; don't know = 4; strangers = 5.
	78	Interpretation of setting--school: as keyed = 1; home = 2; outside on street = 3; don't know = 4; in a conference = 5; at work = 6; other = 7; school or house = 8.
	79	Interpretation of function--a "bull session" (speakers are talking "just to pass the time"--as opposed to some formal purpose such as a seminar or public debate, for example): as keyed = 1; don't know = 2; studying = 3.
	80	Manifest content--topic of conversation is the (political) status of Puerto Rico or the relationship between PR and the US: as keyed = 1; about Puerto Rico = 2; don't know/remember/understand = 3; other = 4.
2	6	Manifest content--Puerto Rico is called "la colonia perfumada" (or perfumed colony): as keyed = 1; don't know/remember = 2; la isla perfumada = 3; mountain = 4; other = 5.
	7	Manifest content--the term (Commonwealth) masks PR's colonial status ("something that stinks"): as keyed = 1; don't know/remember = 2; because it smells bad or because someone put perfume on it = 3; because the island is tropical = 4; the island is dirty = 5; other = 6.
	8	Manifest content--the girl thinks that Commonwealth is an inappropriate term (that PR should not be called a commonwealth): as keyed = 1; don't know/remember = 2; PR should be called a commonwealth = 3; other = 4.
	9	Manifest content--"colony" would be a better name than "commonwealth": as keyed = 1; don't know/remember = 2; other = 3.
	10	Manifest content--she thinks that PR should become independent (should not stay a commonwealth): as keyed = 1; don't know/remember = 2; should be a state = 3; should stay a commonwealth = 4.
	11	Manifest content--the boy thinks that PR should stay a commonwealth: as keyed = 1; don't know/remember = 2; should not stay a commonwealth = 3; should be a state = 4; should be independent = 5; boy disagrees with girl (but R does not give correct response to #10) = 6; other = 7.

12 Manifest content--the factory is in Utuado: as keyed = 1; don't know/remember = 2; on a mountain = 3.

13 Manifest content--the girl meant that one should not disguise an unpleasant fact with a pleasant name (that one should"call a spade a spade"): as keyed = 1; don't know/remember = 2; PR is something special, not just a piece of dirt = 3; restates boy's position = 4; other = 5.

14 (English) manifest content score--total number of ones in card 1, col. 80; card 2, cols. 6-13.

15 Situation score--total number of ones in cols. 77, 78 plus total of col. 14.

16 Social content--the speakers know each other very well (they are friends, friendly; they know each other quite well, well, more than casually): as keyed = 1; don't know/remember = 2; don't know each other well = 3.

17 Social content--the speakers were not angry at one another (were arguing but not angry): as keyed = 1; don't know/remember = 2; angry = 3.

18 Social content--the speakers have at least a high school diploma (well educated): as keyed = 1; less than high school education = 2; don't know = 3; not much education = 4.

19 Social content--the speakers are probably students: as keyed = 1; probably working (no longer in school) = 2; don't know = 3; both working + studying = 4.

20 Total social content score--total number ones in columns 16-19.

21 Language usage--English used primarily by all speakers (with exception of isolated phrases): as keyed = 1; boy used English, girl used Spanish = 2.

22 Language usage--girl said "La colonia perfumada" (or similar Spanish phrase): as keyed = 1; girl used Spanish at one point = 2.

23 Language usage--boy said "un pobre campesino encima de una montana" (or similar Spanish phrase): as keyed = 1; the boy (man) used Spanish at one point = 2; don't remember = 3.

24 Spanish language usage score--total number ones in cols. 22 + 23.

25 Total language usage score--total of col. 24 plus col. 21 (if scored as 1).

26-27 Why did the boy use Spanish whenhe said "un pobre campesino encima de una montana"?

a. he didn't know how to say it in English = 00
b. he remembered he was P.R. = 01
c. that's how it's said = 02
d. he was excited = 03
e. the speakers are PR and understand Spanish = 04
f. easier to say it in Spanish = 05
g. he was from PR = 06
h. she didn't understand English well = 07
i. spoken by a 2nd boy who knew no English = 08
j. English words didn't come to him = 09
k. more effective in Spanish = 10
l. listeners wouldn't understand it in English = 11
m. to explain the meaning more easily = 12
n. he knew both languages = 13
o. don't know = 18
p. R attempts a paraphrase = 19
q. other = 20

28-29 Should Spanish have been used for the above idea?

a. Spanish more appropriate
    1. without qualification = 00
    2. for a P.R., Spanish expresses it better = 01
    3. sounds better in Spanish = 02
b. English more appropriate
    1. without qualification = 10
c. No difference
    1. without qualification = 20
    2. should be in one or the other = 21
d. ambiguous = 30

30-31 Should Spanish have been used for the conversation about Puerto Rico?

a. Spanish more appropriate
    1. without qualification = 00
    2. Spanish sounds better = 01
    3. because they are PR = 02
    4. topic + common background of speakers = 03
    5. topic = 04
b. English more appropriate
    1. without qualification = 10
    2. English easier for speakers = 11
c. No difference
    1. without qualification = 20
d. ambiguous = 30

note: card 2, cols. 32-67 refer to story four

2	32	Interpretation of relationships--secretary and boss (employee and employer): as keyed = 1; friends = 2; students = 3; fellow workers = 4; don't know = 5; other = 6; business relationship = 7; married couple = 8.
	33	Interpretation of setting--office (at work): as keyed = 1; uncertain = 2; over the telephone = 3; at home = 4; at school = 5.
	34	Interpretation of function, first part--transaction of business (dictation of letter): as keyed = 1; other = 2.
	35	Interpretation of function, second part--a personal interaction (talking just to pass the time): as keyed = 1; other = 2.
	36	Interpretation of function score: total number of ones in columns 34 + 35.
	37	Manifest content--the man asked the girl to take dictation: as keyed = 1; don't know/remember = 2; asked her to call someone = 3; asked her for a letter = 4; gave her a letter = 5; other = 6.
	38	Manifest content--he was dictating (writing) a letter: as keyed = 1; don't know/remember = 2.
	39	Manifest content--he was writing a letter of thanks: as keyed = 1; asking for something = 3; sending a get well note = 4; other = 5.
	40	Manifest content--he was (also) writing a covering letter for materials he was returning: as keyed = 1.
	41	Manifest content--he was thanking the man for giving him some information (for telling him about his work): as keyed = 1; for help with the parade = 2; for sending him something = 3; other = 4; don't remember = 5.
	42	Manifest content--he was sending something with the letter: as keyed = 1; not sending anything = 2; uncertain = 3.
	43	Manifest content--he was sending some "forms" (papers): as keyed = 1; he would send forms later = 2; sending money = 3; sending a check = 4; don't remember = 5.
	44	Manifest content--the boss and his family went to the parade: as keyed = 1; boss without family = 2; boss and Mr. Borger = 3.

45 Manifest content--the secretary went to the parade: as keyed = 1; not sure = 2.

46 Manifest content--they liked the parade (they thought it was nice, good, impressive, etc.): as keyed = 1.

47 Manifest content--the man didn't like to see the contrast between the (large) turnout for a parade or festival and the (small) turnout for religious (worthier) activities: as keyed = 1; his children like going to parades but not to church = 2; don't remember = 3; too many people = 4.

48 English manifest content score: total number of ones in columns 37-43.

49 Spanish manifest content score: total number of ones in columns 44-47.

50-51 Total manifest content score: total of columns 48 + 49.

52-53 Situation score: total number of ones in columns 32, 33 plus total in columns 50-51.

54 Social content--the man (boss) has a good (responsible, professional, important, executive) job: as keyed = 1; not important job = 2; don't know = 3; non-professional = 4.

55 Social content--his correspondent has an equally important (good, etc.) job: as keyed = 1; better job = 2; less important = 3; don't know = 4.

56 Social content--the two men probably see each other only through their work (they do not see each other outside of their work): as keyed = 1; they do see each other socially (outside work) = 2.

57 Social content--the boss + secretary like each other. (get along well, are friendly): as keyed = 1; don't know = 2.

58 Social content score: total number of ones in columns 54-57.

59 Language usage--secretary + boss use English for first part of story (for dictation of letter): as keyed = 1; the man uses English = 2.

60 Language usage--secretary + boss use Spanish for second part of story (discussion of parade): as keyed = 1; the man speaks English and Spanish but the girl speaks Spanish only = 2.

61 Language usage--secretary + boss use English to conclude encounter (at end of story): as keyed = 1.

62 English language score: total of columns 59 + 61.

63 Total language score: total of 62 plus col. 60 (if scored as 1).

64-65 Interpretation of appropriateness of Spanish for the discussion about the parade.

a. Spanish more appropriate
  1. without qualification = 00
  2. Spanish should be used with PRs (Spanish people) = 01
  3. Spanish should be used with PRs to talk about PR or about PR topics = 02
  4. Spanish people understand Spanish better = 03
b. English more appropriate
  1. without qualification = 10
  2. English should be used with Americans = 11
  3. " " " " at work = 12
c. No difference
  1. without qualification = 20
  2. they could understand both languages = 21
d. Ambiguous (or don't know) = 30

66-67 Why did the man switch from English to Spanish to talk about the parade?

1. to prevent others from overhearing him = 01
2. Spanish is better for discussing PR topics = 02
3. Parade is Spanish (PR) = 03
4. speakers are Puerto Rican (Spanish) = 04
5. to make an ambiente puertorriqueno = 05
6. he liked to tell it in Spanish = 06
7. to be informal = 07
8. speaker + topic = 08
9. to be clearer (to be understood better) = 09
10. sounds right to speaker = 10
11. ambiguous = 18

note: card 2, cols. 68-80, card 3, cols. 6-21 refer to story five

2 68 Interpretation of relationships--priest and parishioner: as keyed = 1; boss + employer = 2; compadres = 3; friends = 4; father and son = 5.

69 Interpretation of setting--rectory or church: as keyed = 1; office or factory (at work) = 2; conversation took place over phone = 3; church or street = 4; street = 5; at home = 6; church or house = 7.

	70	Interpretation of function--boy has come to ask a favor: as keyed = 1; to ask advice = 2; talking about relative's illness = 3; to pass the time = 4.
	71	Manifest content--the boy's uncle is sick: as keyed = 1; the boy's mother is sick = 2; other relative is sick = 3.
	72	Manifest content--the uncle (sick person) has cancer: as keyed = 1; don't know/remember = 2.
	73	Manifest content--the boy learned about his uncle through a letter: as keyed = 1; from his mother = 2; other = 3.
	74	Manifest content--the boy wanted the priest to write a letter of recommendation for him: as keyed = 1; to recommend a doctor to him = 2; don't know/remember = 3; to read a letter to him = 4; other = 5.
	75	Manifest content--the boy was applying to college (to a special program): as keyed = 1; the boy was looking for a job in PR = 2; looking for a job = 3; don't know = 4; other = 5.
	76	Manifest content--the priest agreed: as keyed = 1; don't know = 2.
	77	Manifest content--the priest asked the boy the name of the person to whom he should write: as keyed = 1; don't know/remember = 2; other = 3.
	78	English manifest content score: total number of ones in columns 74-77.
	79	Spanish manifest content score: total number of ones in columns 71-73.
	80	Total manifest content score: total of columns 78 + 79.
3	6	Situation score: total number of ones in columns 68 + 69 plus total of column 80.
	7	Social content--the priest not a Puerto Rican: as keyed = 1; he is Spanish (Puerto Rican) = 2; uncertain = 3.
	8	Social content--the boy is a member of the priest's church: as keyed = 1; uncertain = 2.
	9	Social content--the boy addresses the priest (man) properly (respectfully, in the right way): as keyed = 1; not properly = 2; like a friend = 3.

10 Social content--the priest will write a good letter: as keyed = 1; will write a "so-so" letter = 2.

11 Social content score: number of ones in columns 7 - 10.

12 Language usage--Spanish used at beginning of story by priest and boy: as keyed = 1; Spanish used for most of story = 2.

13 Language usage--English used during second half of story: as keyed = 1; boy used mostly English and the father used mostly Spanish = 2.

14 Total language usage score: total number of ones in columns 12 + 13.

15-16 Interpretation of use of Spanish for discussing family:
a. Spanish more appropriate
  1. without qualification = 00
  2. Spanish should be used with (by) Puerto Ricans (Spanish people) = 01
  3. Spanish should be used when discussing family matters = 02
  4. Spanish "friendlier" = 03
  5. more interesting in Spanish = 04
b. English more appropriate
  1. without qualification = 10
c. No difference
  1. without qualification = 20
  2. both understand Spanish and English = 21
d. ambiguous = 30
e. undecided

17-18 Interpretation of use of English to ask for letter:
a. Spanish more appropriate
  1. without qualification = 00
  2. Spanish should be used with (by) Puerto Ricans (Spanish speakers) = 01
  3. he began conversation in Spanish = 02
b. English more appropriate
  1. without qualification = 10
  2. English should be used with Americans = 11
  3. " " " " when talking about school = 12
  4. letter to be written in English = 13
c. No difference
  1. without qualification = 20
  2. they could understand both languages = 21
d. ambiguous = 30

19-20 Interpretation of reason for switch from Spanish to English:

1. marks change of topic = 01
2. to talk about school = 02
3. English "easier" for boy (boy knows English better) = 03
4. boy "liked" English more than Spanish = 04
5. he wanted to = 05
6. to make sure priest understood = 06
7. he didn't know how to explain it (say it) in Spanish = 07
8. priest understood English better = 08
9. don't know = 09
10. to practice English = 10
11. to prevent others from understanding = 11
12. letter in English (college is English Speaking)= 12
13. both languages are known = 13
14. ambiguous = 19

21 evaluation of language switching in that situation

1. better to use one language only (Spanish) = 1
2. better to use one language only (English) = 2
3. better to use one language only (no preference)= 3
4. switching o.k. = 4

(IV-4-b)

[THE INTERPRETATION OF INCONGRUENT LANGUAGE USAGE]

[A Study of Conversations]

Please give the following information (for statistical purposes):

1. Age ________
2. Sex ________
3. Place of birth ________
4. Father's place of birth ________
5. Mother's place of birth ________

Directions:

You are going to hear two taped conversations. Each conversation is between people of Puerto Rican background who are living in New York. Some will speak in English, some will speak in Spanish, and some will speak both languages. However, all the speakers know English and Spanish equally well.

You will hear each conversation twice. After you have heard the conversation for the second time you will be asked some questions about what you have heard.

Please do not turn the
page until you are
asked to do so.

First Conversation

Directions:

For each of the following items, circle the letter next to the answer which best completes the statement or answers the question.

> (Remember, all the speakers you have heard know English and Spanish equally well.)

1. What was the relationship between the woman and the girl?

   A. Mother and daughter
   B. Older and younger sisters
   C. Grandmother and granddaughter
   D. Aunt and niece

2. Where were the woman and the girl probably talking?

   A. In a store
   B. In an apartment
   C. On the street
   D. On the front steps (stoop)

3. When the boy called, did the woman ask the boy his name?

   A. Yes
   B. No

4. When did the boy want to go to the movies?

   A. Sunday night
   B. Sunday afternoon
   C. Saturday night
   D. Later, at eight o'clock

5. Which of the following did the girl have to do in order to go out with the boy?

   I Ask her father
   II Introduce the boy to her parents

   A. I only
   B. II only
   C. Both I and II
   D. Neither I nor II

6. How is the boy described?

    A. Short
    B. Good looking
    C. Not good looking
    D. A little fat

7. How did the conversation end?

    A. The boy said he would call the girl's father
    B. The girl asked the boy to call her again
    C. The girl accepted the invitation
    D. The girl told the boy she didn't want to go

8. How long have the boy and girl probably known each other?

    A. Several years
    B. About one year
    C. About six months
    D. A few weeks

9. Does the girl really want to go out with the boy?

    A. Yes
    B. No
    C. She is indifferent

10. How long has the girl's family probably lived in New York?

    A. More than 20 years
    B. 15 - 20 years
    C. 10 - 15 years
    D. 5 - 10 years
    E. 1 - 5 years
    F. Less than 1 year

11. How long has the boy's family probably lived in New York?

    A. More than 20 years
    B. 15 - 20 years
    C. 10 - 15 years
    D. 5 - 10 years
    E. 1 - 5 years
    F. Less than 1 year

12. What kind of job do you think the girl's father has?

    A. Professional; businessman
    B. White collar worker (clerk, office worker, salesman, etc.)
    C. Skilled worker
    D. Laborer

13. What kind of job do you think the boy's father has?

    A. Professional; businessman
    B. White collar worker (clerk, office worker, etc.)
    C. Skilled worker
    D. Laborer

14. How old do you think the girl is?

    A. Over 18
    B. 17
    C. 16
    D. 15
    E. Less than 15

15. How old do you think the boy is?

    A. Over 18
    B. 17
    C. 16
    D. 15
    E. Less than 15

16. How would it have sounded if the boy and girl had talked to each other in English?

    A. More natural
    B. Less natural
    C. It would have made no difference

17. How would it have sounded if the woman and the girl had talked to each other in Spanish?

    A. More natural
    B. Less natural
    C. It would have made no difference

18. How would it have sounded if the woman and the boy had talked to each other in English?

A. More natural
B. Less natural
[✓ C. It would have made no difference]

Please do not turn to the
second set of questions
until you have heard the
second conversation twice.

Second Conversation

Directions:

For each of the following items, circle the letter next to the answer which best completes the statement or answers the question.

> (Remember, all the speakers you have heard know English and Spanish equally well.)

1. Who, in addition to the guest, were speaking?

   A. Husband and wife
   B. Mother and son
   C. Brother and sister

2. Where did the conversation probably take place?

   A. In a store
   B. In an apartment
   C. On the street
   D. On the front steps (stoop)

3. At about what time did the conversation take place?

   A. About three o'clock
   B. About lunch time
   C. About seven o'clock
   D. About five o'clock

4. Was the woman the first to ask the guest to stay?

   A. Yes
   B. No

5. When the guest was asked to stay, the food was

   A. being prepared
   B. already served

6. Did the guest agree to stay?

   A. Yes
   B. No

7. How did the woman really feel about the guest staying?

    A. She hoped he would stay
    B. She hoped he would not stay
    C. She was indifferent

8. How did the guest really feel about staying?

    A. He would rather stay
    B. He would rather not stay
    C. He was indifferent

9. How long has the woman probably lived in New York?

    A. More than 20 years
    B. 15 - 20 years
    C. 10 - 15 years
    D. 5- 10 years

10. How long has the guest probably lived in New York?

    A. More than 20 years
    B. 15 - 20 years
    C. 10 - 15 years
    D. 5 - 10 years
    E. 1 - 5 years
    F. Less than one year

11. How many grades of school has the woman probably completed?

    A. More than 12
    B. 10 - 12 only
    C. 7 - 9 only
    D. 4 - 6 only
    E. Less than 4

12. How many grades of school has the guest's father probably completed?

    A. More than 12
    B. 10 - 12 only
    C. 7 - 9 only
    D. 4 - 6 only
    E. Less than 4

13. How would it have sounded if the woman and the guest talked to each other in Spanish?

    A. More natural
    B. Less natural
    C. It would have made no difference

14. How would it have sounded if the guest and his friend had talked to each other in English?

    A. More natural
    B. Less natural
    C. It would have made no difference

[PART II] [WORD STUDY]

DIRECTIONS

Attached you will find sixteen different pages. At the top of each page there is a word. If you feel that the word at the top of the page is extremely related to one end of any of the scales on that page you should place your check mark as follows:

✓						
extremely good	quite good	slightly good	indifferent	slightly bad	quite bad	extremely

OR

						✓
extremely good	quite good	slightly good	indifferent	slightly bad	quite bad	extremely bad

If you feel that the word is quite closely related to one or the other end of any of the scales (but not extremely), you should place your check mark as follows:

	✓					
extremely large	quite large	slightly large	indifferent	slightly small	quite small	extremely small

OR

					✓	
extremely large	quite large	slightly large	indifferent	slightly small	quite small	extremely small

If the word seems only slightly related to one side as opposed to the other side (but is not neutral), then you should check as follows:

		✓				
extremely active	quite active	slightly active	indifferent	slightly passive	quite passive	extremely passive

OR

				✓		
extremely active	quite active	slightly active	indifferent	slightly passive	quite passive	extremely passive

If you consider the word to be neutral or indifferent then you should check the indifferent category.

			✓			
extremely sharp	quite sharp	slightly sharp	indifferent	slightly dull	quite dull	extremely dull

IMPORTANT:

1) Be sure you check every scale for every word--DON'T OMIT ANY

2) NEVER put more than one check mark on a single scale

familia*

1.	muy bueno(a)	bastante bueno(a)	pasable	indiferente	poquito malo(a)	bastante malo(a)	muy malo(a)
2.	muy fuerte	bastante fuerte	poquito fuerte	indiferente	poquito débil	bastante débil	muy débil
3.	muy limpio(a)	bastante limpio(a)	poquito limpio(a)	indiferente	poquito sucio(a)	bastante sucio(a)	muy sucio(a)
4.	muy grande	bastante grande	poquito grande	indiferente	poquito pequeño(a)	bastante pequeño(a)	muy pequeño(a)
5.	muy agradable	bastante agradable	poquito agradable	indiferente	poquito terrible	bastante terrible	muy terrible
6.	muy pesado(a)	bastante pesado(a)	poquito pesado(a)	indiferente	poquito leve	bastante leve	muy leve
7.	muy dulce	bastante dulce	poquito dulce	indiferente	poquito agrio(a)	bastante agrio(a)	muy agrio(a)
8.	muy rápido(a)	bastante rápido(a)	poquito rápido(a)	indiferente	poquito lento(a)	bastante lento(a)	muy lento(a)
9.	olor muy fragante	olor bastante fragante	olor poquito fragante	indiferente	olor ligeramente ofensivo	olor bastante ofensivo	olor muy ofensivo
10.	muy activo(a)	bastante activo(a)	poquito activo(a)	indiferente	poquito pasivo(a)	bastante pasivo(a)	muy pasivo(a)
11.	muy lindo(a)	bastante lindo(a)	poquito lindo(a)	indiferente	poquito feo(a)	bastante feo(a)	muy feo(a)
12.	muy afilado(a)	bastante afilado(a)	poquito afilado(a)	indiferente	poquito embotado(a)	bastante embotado(a)	muy embotado(a)

[*The Spanish version consisted of 16 pages, one word to a page, as follows: familia, escuela, padre, tiza, casa, lección, plato, maéstro, sal, estudiante, sopa, pizarra, sala, historia, padres, ciencia. The English version consisted of the English equivalents of these same home and school words.]

[PART III]

[WORD STUDY]

Along the left-hand margin, below, is a list of common English and Spanish words. Next to each pair of words are 5 choices:

SAMPLE

Donkey	A	B	C	D	E
Burro	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.

If you hear or say the English word (Donkey) far more often than the Spanish word (Burro) check category A. If you hear or say the English word (Donkey) only slightly more often than the Spanish word (Burro) you should check B. If you hear or say the English word equally as often as the Spanish word you should check C. If you hear or say the Spanish word (Burro) slightly more often than the English word (Donkey) you should check D. Finally, if you hear or say the Spanish word (Burro) far more often than the English word (Donkey) check category E. Do the following words in the same way:

Family	A	B	C	D	E
Familia	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.

School	A	B	C	D	E
Escuela	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.

Father	A	B	C	D	E
Padre	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.

(IV-5-b)

Chalk Tiza	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Home Casa	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span.than in Eng.
Lesson Lección	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Dish Plato	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Student Estudiante	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Salt Sal	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Science Ciencia	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Soup Sopa	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.
Living-room Sala	A Hear or say far more in Eng. than in Span.	B Hear or say slightly more in Eng. than in Span.	C Hear or say equally in Span. and Eng.	D Hear or say slightly more in Span. than in Eng.	E Hear or say far more in Span. than in Eng.

(IV-5-b)

Blackboard	A	B	C	D	E
Pizarra	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.
History	A	B	C	D	E
Historia	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.
Parents	A	B	C	D	E
Padres	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.
Teacher	A	B	C	D	E
Maéstro	Hear or say far more in Eng. than in Span.	Hear or say slightly more in Eng. than in Span.	Hear or say equally in Span. and Eng.	Hear or say slightly more in Span. than in Eng.	Hear or say far more in Span. than in Eng.

(IV-6-b and V-1)

[2. Perception Tape for Phonological Variables]

Instructions: Please listen carefully. You will hear the same word or phrase spoken in two different ways. The speaker will then repeat one of the pronunciations. Tell me whether it was more like the first or more like the second. If you can't seem to hear any difference, make a guess. Here is an example in Spanish: 1. *hasta* 2. *hahta* Repeat: *hasta*. Is the repeated word more like the first one or the second one? Here is another example: 1. *tarde* 2. *talde* Repeat: *talde*. Is the repeated word more like the first one or the second one? Spanish list first.

---

1. *interesado*	2. interesao	(Underlined form represents repeated word)
1. mas	2. *mah*	
1. *comel*	2. comer	
1. partes	2. *paltes*	
1. *pan*	2. pang	
1. guhto	2. *gusto*	
1. *acuerdo*	2. acueldo	
1. xopa	2. *rropa*	

Continued instructions: "We will now do the same thing, this time using English. Here is an example in English: 1. *nothing* 2. nuthin' Repeat: *nuthin*'".

---

1. bad	2. *byed*
1. most	2. *must*
1. *heat*	2. (el) hit
1. my friend	2. *my fren*
1. *hiya*	2. here
1. *car*	2. ca
1. *coming*	2. cawming
1. It's a dog	2. *I's a dog*

[5. Reading of Word Lists]

(V-1)

Please read the following words once only; pause between each one.

Spanish

mismo

recogido

escuchado

muñecas

corredor

perdidos

ñoño

escrachao

carpeta

usted

English

brothers

lovely

glasses

dozen

disease

mast

stuffed

cheers

matting

dance

READING NO. 1

Por la tarde hizo calor, pues fueron al mar y se echaron debajó de un árbol. Flor y Angel quisieron tomar sol. Leonor les hizo ponerse crema para no quemar la piel. Despues de poco tiempo, los dos muchachos se fueron a buscar conchas marinas. El año pasado, habían recogido algunos pero esta vez, querían unas mas grandes.

(V-1)

READING NO. 2

One of my best friends is named Harry. He's always trying to act like a real tough guy. His mother doesn't like it because he uses bad language. In fact, she can't stand it. The other day, she asked him what he was trying to prove and he mumbled something like "I don't know" and shuffled his feet like a lost puppy. Last year, he didn't seem as bad as this year. Even his teachers can't keep up with him and leave him alone.

(V-1)

READING NO. 3

Como es de suponer las noches de debut o estreno en cualquier cabaret o club nocturno, son noches especiales, en esta ocasión y al "Alameda" se dueron cita, la noche de la reaparición de Rocio de Granada, su tío el guitarrista Sabica, el conocido y muy estimado hombre de empresas Manuel Garcia Busto, acompañado de su gentil esposa y su encantadora hija, que reside en España, Bobby Capó, cancionista y figura de relieve en la T.V. hispana en Nueva York.

(V-1)

READING NO. 4

An all-year, glass-enclosed swimming pool, the first of its kind in the city, will be built in Commodore Barry Park in Brooklyn. Completion is expected in 1968. According to the plans, the pool will be built at the corner of Navy and Nassau Streets. The pool will be operated by the Department of Parks and will serve the area which includes Fort Green. It is designed for youngsters and teenagers, but there will be a balcony for adults.

OE 6000 (REV. 9-66)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

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TITLE
Bilingualism in the Barrio; The Measurement and Description of Language Dominance in Bilinguals. Final Report

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bilingual dominance configurations, domain analysis

ABSTRACT

A variety of techniques for the measurement and description of widespread and relatively stable intra-group bilingualism were derived from the disciplines of sociology, psychology and linguistics. These were administered to the same respondents, 48 Spanish-English bilinguals who lived in a Puerto Rican neighborhood near New York, in order to assess the relationships among these measures and their relative utility as predictors of four proficiency criteria. A factor analysis performed on the intercorrelations among 124 scores indicated area of interdisciplinary overlap as well as uniqueness. The best predictors of the criteria were obtained from retrospective reports of proficiency and usage. However, scores from other techniques provided significant increments in the cumulative prediction of the four criteria, a very high proportion of whose variance was explainable through multiple regression analysis.

Supplementary studies provided background information concerning the language attitudes and related behaviors of the speech community studied as well as of the larger Puerto Rican community in the Greater New York City area with which it identifies itself. Contrasts with Puerto Rican bilinguals in Puerto Rico and with Yiddish-English bilinguals in New York also provided greater certainty with respect to the instruments constructed and analytic constructs and procedures utilized.